The Future of Industry
in the
SAN BERNARDINO VALLEY

A Report Prepared by

Industrial Survey Associates

San Francisco

for the

San Bernardino Valley Industrial Committee

April 23, 1951

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605 Market Street San Francisco

Stuart Parry Walsh
Harold V. Pederson Margaret Burt

for the

San Bernardino Valley Industrial Committee

April 23, 1951

FINDING AND INTERPRETING ESSENTIAL FACTS FOR BUSINESS AND COMMUNITY DEVELOPMENT

INDUSTRIAL SURVEY ASSOCIATES
WEST COAST LIFE BUILDING -:- 505 MARKET STREET
SAN FRANCISCO 5, CALIFORNIA
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April 23, 1951

San Bernardino Valley Industrial Committee
San Bernardino, California

Gentlemen:

We submit herewith our report on the survey undertaken at your direction December 4, 1950. A brief summary of the conclusions, with recommendations for action, will be found on pages 7 to 10.

In completing this report we want to acknowledge the very fine cooperation received from the many community leaders and public officials with whom we have discussed various problems affecting the future of the San Bernardino Valley area.

Special thanks are due the staff members of the public and private agencies mentioned in the Foreword, all of whom have contributed valuable counsel as well as much factual material to this study. The staff and committee members of the chambers of commerce of Colton, Fontana, Redlands, and San Bernardino have been extremely helpful, and the coordinator of your committee, Mr. Arthur W. Walker, has rendered continuous assistance.

Our work has also been greatly aided by Mr. Van Beuren Stanbery, Area Development representative of the United States Department of Commerce, who has had a very wide experience with regional problems, and who directed the San Bernardino study by the State Reconstruction and Reemployment Commission seven years ago.

The sincere interest shown by all with whom we have come in contact indicates that the industrial development program of the Valley will be effectively carried forward.

Respectfully submitted,

INDUSTRIAL SURVEY ASSOCIATES

Stuart P. Walsh

Stuart Parry Walsh, Director

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Foreword

THE SURVEY AREA IDENTIFIED

San Bernardino County, which is the largest county in California and about half the size of the State of Ohio, is a little too big to be properly considered as a single economic area. Most of the county is very sparsely inhabited and very slightly developed. Only in the southwest corner of the county, between the San Bernardino National Forest and the Riverside County line, is there any extensive concentration of agriculture, industry, and population.

In the western end of this foothill and valley section, close to the Los Angeles County boundary, are the cities of Chino, Ontario, and Upland. In the eastern end are the four cities of Rialto, Colton, Redlands, and San Bernardino (the county seat), and the unincorporated communities of Fontana and Bloomington.

This latter area, extending about twenty miles east and west from Redlands to a point halfway between Fontana and Ontario, and about eleven miles north and south, from the National Forest boundary to the Riverside County line, is identified as the San Bernardino Valley for the purposes of the present survey. (See map following Page 10).

This area is a fairly compact economic unit, yet large enough to provide a substantial labor force, diversified employment, and a wide range of urban, suburban, and rural living conditions. However, since this area is not a political subdivision, and since it includes unincorporated as well as incorporated communities, it does not lend itself quite as readily to statistical analysis as a single city or an entire county would do. Some of the figures used in this report are therefore estimates rather than official state or federal data, and they are labelled as such. On subjects for which official data for certain cities or for the county as a whole appear to be significant, they are included for reference in the appendix.

A great deal of factual material on the survey area has been provided by various departments of the county government, and the city governments concerned, as well as the railroads and utilities serving the area.

MAJOR SOURCES OF INFORMATION

Among the most helpful sources of information the following can be listed: United States Department of Commerce Regional Office at Los Angeles; Pacific Coast Board of Intergovernmental Relations at San Francisco; California state departments of Employment, Industrial Relations, and Conservation; San Bernardino County Industrial Department and County Planning Commission; city administrative officers, planning commissions, and postmasters of Colton, Redlands, and San Bernardino; and county district offices and postmaster at Fontana.

MAJOR SOURCES OF INFORMATION, Cont'd:

Mention should also be made of the Southern California Gas Company, the Southern California Edison Company, California Electric Power Company, numerous private water companies, the Southern Pacific, Santa Fe, and Union Pacific railroads, the California State Chamber of Commerce, the California State and the San Bernardino County Taxpayers' associations, all the Valley newspapers, and many business and industrial concerns.

Numerous conferences have also been held with local groups and individual business leaders in all the communities involved in the survey. A list of the published sources of information will be found in the Appendix.

OBJECTIVES IN VIEW

A survey is of value only when its findings are translated into action. Facts by themselves mean little until something is done about them. A survey can present the facts and suggest possible lines of action; then it becomes a tool for use of community leaders in shaping local progress. This survey is intended as a tool for the local chambers of commerce at Colton, Fontana, Redlands, and San Bernardino, and for the Valley Industrial Committee which they have formed.

The purpose in forming this committee is well set forth in the statement of objectives adopted at its meeting January 22, 1951, as quoted below:

"I. PURPOSE: The purpose of the San Bernardino Valley Industrial Committee is to foster and coordinate development of industrial payrolls in the San Bernardino Valley area.

"II. OBJECTIVES: The specific objectives of the SBVIC are:

1. To cooperate with local industrial committees and upon request to offer advisory services to industries located within the San Bernardino Valley.

2. To assist in placing industries in locations of greatest advantage to those industries and to the Valley.

3. To assist communities of the Valley in the solution of special problems relating to industries and having to do with: water supply; waste disposal; electrical power; gas supply; tax rates; rail facilities, and rail rates; labor supply; labor relations; zoning.

4. To assist the communities in the Valley in the field of industrial public relations and to coordinate publicity releases affecting the Valley as a whole.

5. To induce new industries into the Valley area.

OBJECTIVES IN VIEW, Continued:

> "III. MOTIVATION: The SBVIC is organized to function in the spirit of mutual cooperation between communities of the Valley to the end that the industrial development of the Valley as a whole shall be paramount and in the belief that the best interests of all communities will be best served in this way. To endeavor to serve all communities of the Valley as: an advertising agency; a coordinating agency; an advisory agency."

Considerable thought was given to the foregoing statement of purpose by all the members of the committee, and particularly by Chairman Harvey H. Head of the subcommittee which put the statement together. The activities of the "SBVIC" under the leadership of William O. Mulligan of Redlands, its general chairman, will be carried on according to the guiding policies thus adopted. Those policies appear to be well designed for effective progress in the Valley's industrial development.

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

In the light of the facts and informed opinions obtained and studied in the course of this survey, the following conclusions and recommendations appear to be justified. They are set forth briefly here, on the assumption that they will be considered by reference to the complete text of the report which follows.

1.--THE ECONOMY OF THE SAN BERNARDINO VALLEY AREA

While the early development of this area was founded mainly on mining, agriculture, and recreation, its recent growth has been due primarily to the heavy industries and the large military establishments which are located here.

While manufacturing industry is now a major contributor to the economy of the area, there are extensive possibilities for further industrial expansion. The analysis of these possibilities, presented in Parts B and C of this report, provides a basis for the long-range program of industrial development being undertaken by the Valley Industrial Committee, with the cooperation of the communities which it represents.

2.--INDUSTRIAL POTENTIALS

The present industries in the San Bernardino Valley are chiefly concentrated in steel and cement manufacturing, food processing, and chemicals. While all these have possibilities for further growth, particularly in products for the expanding western market, the most promising field of development appears to be the steel-using and other raw-material centered industries which are already expanding here. There are also extensive possibilities in many types of market-centered and "foot-loose" industries, for which the location factors are particularly favorable. These industries are described in Part C of this report.

3.--COMMUNITY EDUCATION

While residents of the San Bernardino Valley seem to be generally aware of the desirability of larger industrial payrolls, there is room for wider understanding of this phase of economic security.

There are a number of popular misconceptions about the effect of industry upon a community--for example, the belief that it brings unsightly structures, labor strife, traffic congestion, or water scarcity and pollution. Actually few types of industry bring any such unwelcome results, and those types need not be sought for this area. To enlist the cooperation of merchants, professional men, public officials, agriculturists, and other citizens in expanding industrial payrolls in the Valley area, the benefits of such expansion need to be plainly set forth.

The Chamber of Commerce committees concerned with community relations should carry on a continuous program of education to acquaint the public with the objectives of the industrial program. Well-briefed speakers should be made available to service clubs and other organizations throughout the Valley area. Full use should be made of the press and radio, and schools should be supplied with pertinent information regarding industrial development.

4.--CONTACTS WITH SOURCES OF INDUSTRIAL PLANNING

Manufacturers seeking plant locations seldom make preliminary inquiries through local chambers of commerce, but through banks, industrial realtors, railroads, utility companies, or trade associations--in Los Angeles, San Francisco, Chicago, or New York. They get facts and figures from regional, state, and federal offices for a comparison of various areas and communities. Often they decide, on the basis of information from these sources, which areas merit further consideration.

Therefore it is necessary that the Valley area be well and favorably known in those many "communication centers" which are in fact the outposts of local chambers of commerce. It is especially important for these chambers to combine their efforts in these contacts, for they can thus secure better attention than any single community could obtain by itself.

The Valley Industrial Committee should establish contacts with appropriate regional, state, and interstate offices and organizations, serving such fields as national defense, manufacturing, agriculture, and public affairs, to acquaint them with the industrial advantages of this area. Through these contacts the Committee can keep in touch with developments in many fields that vitally affect future industrial growth.

5.--PHYSICAL PROBLEMS OF INDUSTRIAL EXPANSION

In addition to the problems of industrial promotion mentioned above, there are other important problems relating to the physical growth of the communities in which industries are established. These problems are discussed in Part B of this report under such headings as Transportation, Water Supply and Waste Disposal, Recreation Facilities, Fuel and Power, and Local Government. Under the latter heading are included such matters as zoning regulations, taxes, incorporation, etc.

All the subjects listed above are handled wholly or in part by city and county governments. They provide, maintain, or regulate most of the basic physical conditions under which people live and make their living. This is at best a difficult task in fast-growing communities.

In the San Bernardino Valley the problems created by rapid growth are numerous and pressing. One of them is the incorporation of "towns" to form cities. Another is the prevention of blighted or slum areas inside the cities or on their fringes, and the redevelopment of blighted areas that already exist.

Another problem is the coordination of city and county planning for streets, parks, and private land uses, including the very difficult matter of zoning in the entire Valley area. Other important problems are the extension of essential public services required by rapid growth and the enlargement of tax revenues to pay for those services.

In all these matters local government should have the counsel of chambers of commerce and other civic groups in reaching wise decisions. Local chambers should also continue their efforts to educate the public as to the issues involved.

6.--THE IMPACT OF DEFENSE ACTIVITIES

The national defense program affects every phase of economic growth in the Valley area, and complicates all the problems discussed in this report. Among the possibilities for which Valley communities should be prepared, two appear to deserve special notice here:

- Expansion of military bases. Increased activities already under way and others that are in prospect will create needs for housing, utilities, schools, and many types of services beyond what the normal growth of the Valley area would require.

- New defense industries. The advantages of the San Bernardino Valley for industrial operations with exceptional requirements of raw materials, transportation, power, etc., may lead to the location here of defense production activities which would not be expected under normal conditions.

Therefore it seems desirable for the Valley Industrial Committee, as well as local government agencies, to keep in close touch with federal administrators at Washington and on the Pacific Coast, so that problems can be dealt with promptly as they arise.

7.--VALLEY-WIDE PROMOTION

Since no single community is self-sufficient, and since all but the smallest business and industrial firms must consider entire areas or regions in planning their operations, it is important that the industrial development of the Valley communities be promoted in a unified program. The area covered by the present survey is the smallest that can be considered as an economic unit--it comprises one labor force, one housing resource, and one transportation network.

7.--VALLEY-WIDE PROMOTION, Continued:

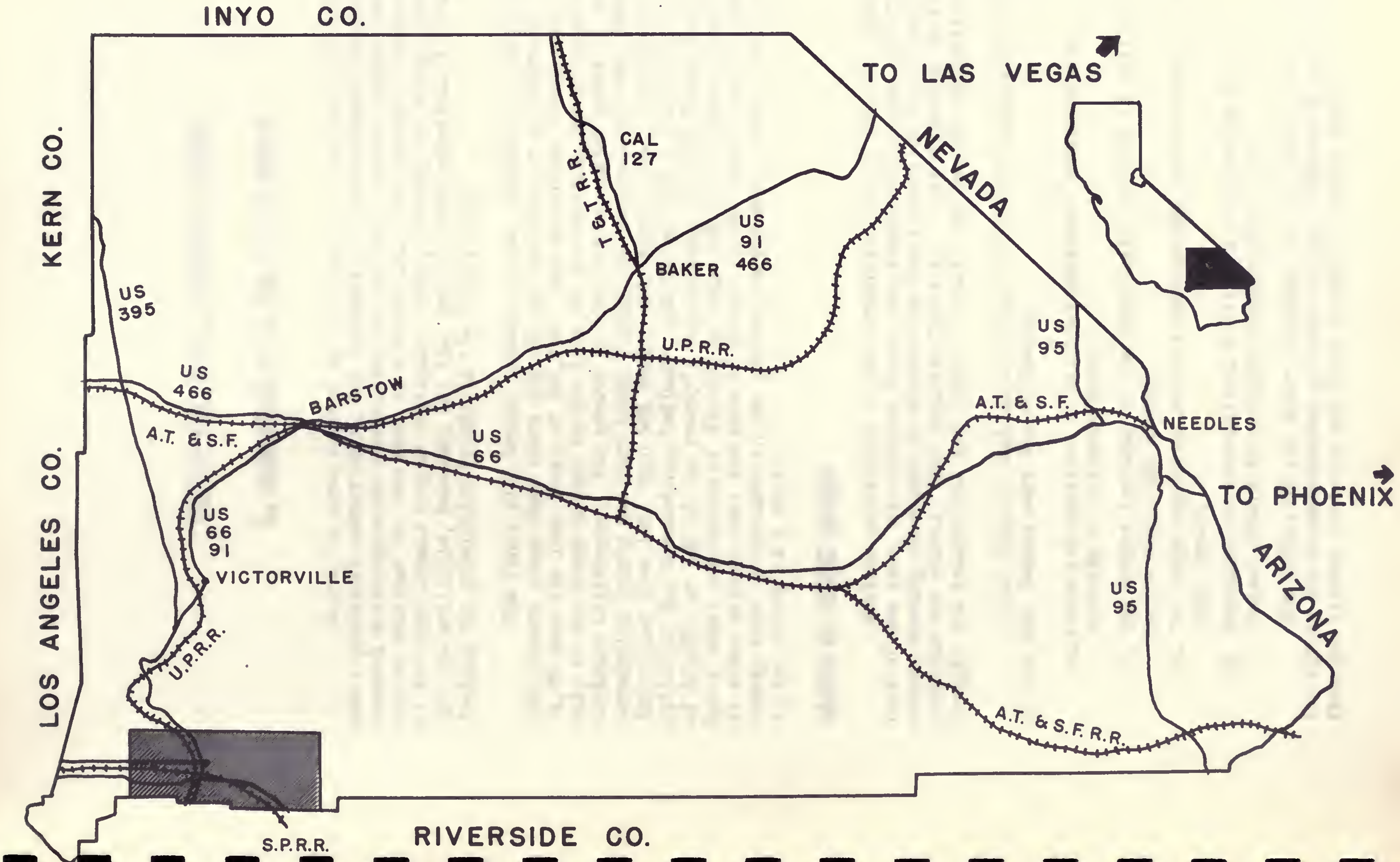
The Valley is in turn a part of the larger natural area which includes Ontario and Riverside, and it is also part of the still larger Los Angeles region, with which it has many economic ties. It has even closer ties with San Bernardino County as a recognized political subdivision of the state.

The Valley Industrial Committee can render a vital service in representing and promoting the Valley area as a unit in these larger circles, and can coordinate the treatment of Valley-wide development problems such as are discussed in the present report.

The facts and analyses which support the foregoing conclusions and recommendations are set forth in the following pages of the report.

SAN BERNARDINO COUNTY, CALIFORNIA
AND
SAN BERNARDINO VALLEY SURVEY AREA

(SHOWN SHADED)



PART A--THE BASIC ECONOMIC PATTERN

1. POPULATION FACTS AND FUTURE GROWTH

Since the area covered by this survey is not an entire county nor a political subdivision, but includes four incorporated cities and several unincorporated communities, no accurate current population data can be obtained for the area as a whole until the township breakdowns of of the 1950 Census become available. City, county, and state figures are now available, however, and they provide many significant facts affecting the population trends in the Valley area.

The final 1950 Census release on the population of San Bernardino County shows that there are 281,642 persons, or an increase of 74.8% over the 1940 total of 161,108. San Bernardino County was second only to San Diego County in its rate of growth among the 10 counties of Southern California. The growth in the unincorporated areas of San Bernardino County was very rapid during the decade--well over 100%--while the cities grew less than 50% during this same period. In 1940 the cities of San Bernardino, Redlands, and Colton had a combined population of 67,676, or 42% of the county's population. In 1950 these same cities had a total population of 95,623, or only 34% of the county population. It seems evident that the rate of growth in the unincorporated area of the county that is included in the present survey was somewhat faster than in the county as a whole.

CAUSES OF RECENT GROWTH

Wartime activities in San Bernardino County created large numbers of new jobs, at military bases, new industrial plants, and railroad shops, drawing thousands of workers and their families from other communities and states. (See Appendix Table 1). This migration in turn brought new demands for all kinds of retail and service activities.

Other factors that contributed to the rapid population growth of the last decade were the following:

a. Wives and families of military personnel moving to the vicinity of military bases.

b. The sudden increase in the birth rate, locally as well as in the state and nation.

c. The large influx of retired persons and health seekers from other areas.

d. Expansion of recreational facilities, reflecting the increased demand from nearby metropolitan areas.

The effect of all these movements on the population growth of the cities and unincorporated portions of the Valley area can be seen from the figures that are set forth on the following pages.

1. POPULATION FACTS AND FUTURE GROWTH, Cont'd

Growth was most rapid during the first half of the decade because of the impetus of defense activities. There was not a mass exodus of people from the area when World War II ended, as some had predicted. The newly established and expanded basic industries had an ever-growing market for construction materials and for civilian goods, which caused most types of employment to increase. Military bases have remained active.

The present population to be credited to the San Bernardino Valley has been estimated at 60 percent of the county total. This estimate was obtained by applying township data for its 1930 and 1940 population to the 1950 county population. This was checked by the 1950 percentage of total county elementary school enrollment that was in the districts located in the Valley area.

The area under discussion includes all or part of the following townships with a comparison of the 1930 and 1940 populations. The 1950 detailed breakdown for these subdivisions may not be available for some time.

Township	1930 Population	1940 Population
Bloomington	3,439	4,135
Colton	9,932	12,123
Fontana	3,196	4,115
Mission (Redlands Area)	3,203	3,812
Redlands	15,983	16,137
Rialto (part)	1,400	1,500
San Bernardino	42,071	52,048
Total population	79,071	93,870
County population	133,900	161,108
Percent of the County's total population	59.3%	58.3%

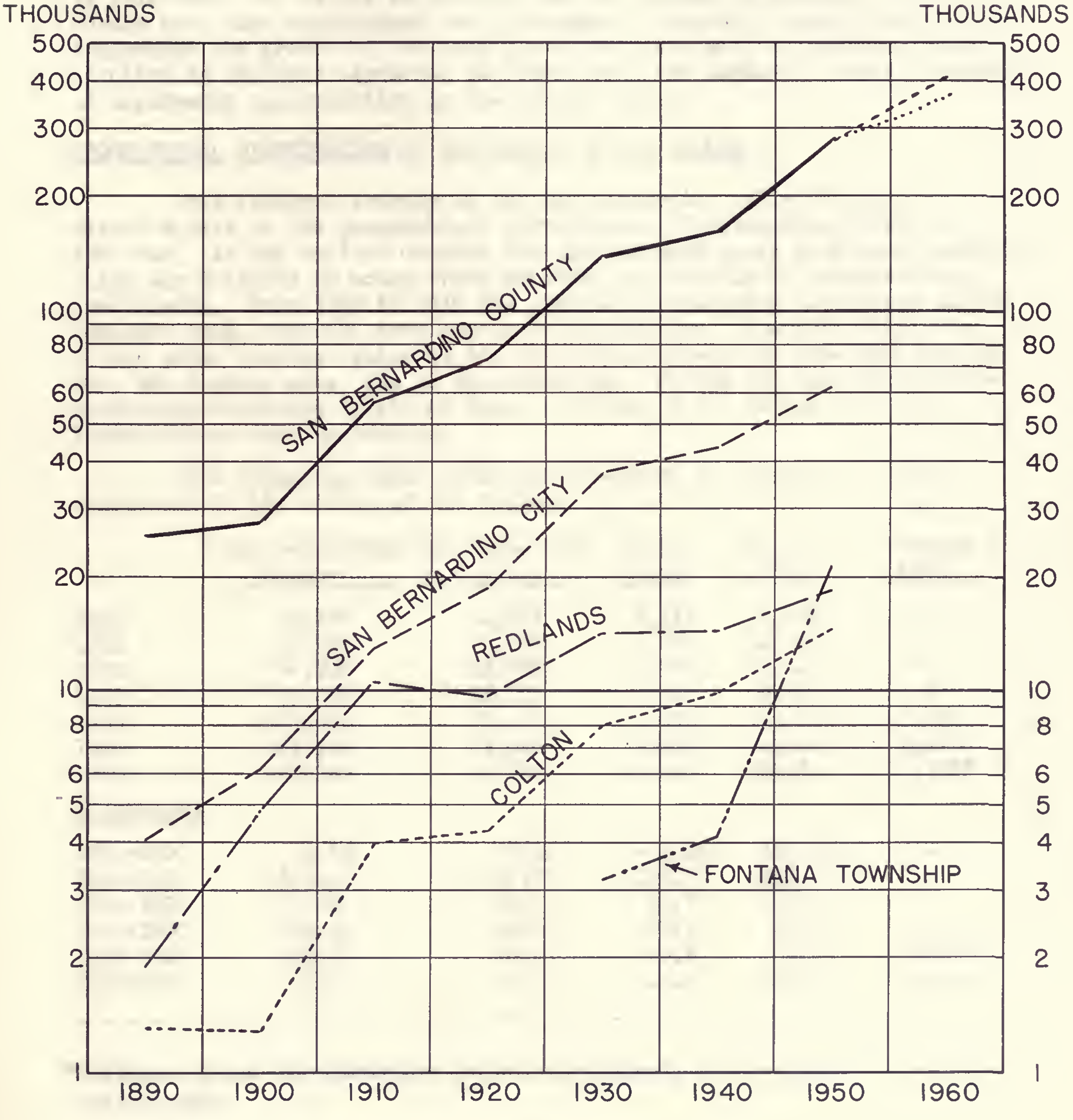
School District *	1950 Enrollment	1950 Est. Population	Percent Pop. Growth Est. (1940-1950)
Bloomington	1,131	7,747	53.4%
Colton	2,771	18,981	57.3
Fontana	3,101	21,242	416.4
Redlands	3,106	21,275	6.9
Rialto	749	5,131	241.2
San Bernardino	12,770	87,475	
Del Rosa	253	1,733	55.4
Highland	437	2,993	
Mill	275	1,884	
Total	24,595	168,461	
County Population		281,642	

*Figures not strictly comparable because of boundary differences.

SAN BERNARDINO VALLEY

POPULATION GROWTH

(SEMI-LOGARITHMIC SCALE)



FOR EXPLANATION OF PROJECTED COUNTY POPULATION 1950-1960 SEE PAGE 16

1. POPULATION FACTS AND FUTURE GROWTH, Cont'd

The foregoing figures indicate that the greatest portion of the growth in the Valley area occurred in that section west of San Bernardino City. The Fontana, Bloomington, and Rialto school districts are located in this area. It is not surprising that the largest population growth should have been experienced here, because the greatest single factor that influenced the growth of the county was the steel mill at Fontana, which resulted in business expansion of other types and caused a "chain reaction" of employment opportunities in the Fontana area.

GEOGRAPHICAL DISTRIBUTION OF POPULATION IN THE VALLEY

The changing economy of the San Bernardino Valley has had a marked effect on the geographical distribution of population growth in the area. In the earlier decades the agricultural areas grew most rapidly, which was followed by urban trade centers, and finally by manufacturing development. From 1890 to 1910 the greatest development took place in the Redlands area, with the development of agriculture. The next shift was to the major trading center of the San Bernardino-Colton area and finally into the Fontana area, due to manufacturing. During the last decade manufacturing developed in all of these sections of the Valley, but to a lesser degree than in Fontana.

The following table shows the growth as it took place in the county and in the cities of the Valley:

	San Bernardino County	San Bernardino City	Colton City	Redlands City	Fontana Area
1890	25,497	4,021	1,315	1,904	-
1900	27,929	6,150	1,285	4,797	-
1910	56,706	12,779	3,980	10,449	-
1920	73,401	18,721	4,282	9,571	-
1930	133,900	37,481	8,014	14,177	3,196
1940	161,108	43,646	9,686	14,324	4,115
1950	281,642	62,792	14,420	18,411	21,250*
% Increase					
1890-1900	9.1%	53.0%	- 4.4%	152.0%	-
1900-1910	103.0	100.7	222.0	118.0	-
1910-1920	29.4	38.7	10.7	- 8.4	-
1920-1930	82.4	100.0	87.2	47.9	-
1930-1940	20.3	16.4	20.8	1.6	28.8%
1940-1950	74.0	43.9	48.9	28.5	416.4 *

---

*Estimates based on elementary school enrollment, as described on the preceding page.

1. POPULATION FACTS AND FUTURE GROWTH, Cont'd:

From the figures shown on the preceding page, it is evident that for the past several decades there has been a wavelike trend of growth--a high-increase decade being followed by a decade of comparatively slow growth. If this pattern should hold true during the 1950-1960 decade, the rate of our population growth will be relatively slower than was experienced during the past 10-year period. The reasons for this particular growth trend and the possibility of its recurring during the next decade are of interest at this point.

The fluctuations in the growth of San Bernardino County have paralleled similar fluctuations in Los Angeles County, the state of California, and the United States as a whole, as shown in the following table:

RATE OF POPULATION GROWTH

Decade	San Bernardino County	Los Angeles County	California	United States
1890-1900	9.1%		22.4%	20.7%
1900-1910	103.0	196.0	60.1	21.0
1910-1920	29.4	85.8	44.1	14.9
1920-1930	82.4	135.8	65.7	16.1
1930-1940	20.3	26.1	21.7	7.2
1940-1950	74.0	47.8	53.3	13.6

The figures here indicate that population generally grows more rapidly during periods of prosperity than during periods of depression. During periods of prosperity the population is more mobile because people are more willing to take a chance in new areas. Thus the high rate of population increase in California and in San Bernardino County was during the three decades of relatively high prosperity. There also is a close relationship between the growth of Los Angeles and San Bernardino counties. The 1940-50 decade was the first in which the rate of growth in San Bernardino County exceeded that of Los Angeles County.

The Valley area offers definite advantages for certain types of industry, and its population may be expected to continue growing at a relatively high rate in the decades immediately ahead.

FUTURE POPULATION GROWTH

If the wavelike growth pattern of California and San Bernardino County is to hold true for the 1950-60 decade, San Bernardino County should experience a somewhat slower rate of growth than in the 1940's. Whether these past relationships of population growth between the state

1. POPULATION FACTS AND FUTURE GROWTH, Cont'd:

and the county will persist in future decades it is impossible to say. The present outlook is for the continued expansion of industry and other economic activity at a relatively high rate. Any forecast of growth at this time is complicated by national defense, which might cause an extremely rapid increase in employment at the military installations in the Valley area.

It seems reasonably certain that population growth will be directly related to industrial development, as explained earlier in this section of the report, and as will be further discussed in Part C.

Population estimates for the state of California in 1960 range from a low of 12,500,000 to a high of 14,000,000, or increases ranging from 16.3% to 29.0%. These figures are from a recent report of the Pacific Coast Board of Intergovernmental Relations.* Professor William A. Spurr, of the Graduate School of Business of Stanford University, has published an April 1960 forecast for the state as well as for the various counties. In his report a state population of 14,108,000 by 1960 is forecast, or an increase of 34.5% over 1950. San Bernardino County is to have an estimated 407,000 population by 1960, a rise of 45%. This would mean a numerical increase of 125,000 over 1950.

A population increase of 125,000 would call for between 40,000 and 45,000 additional jobs created during the decade, about 25 percent of which will have to be in industrial employment. This would mean an increase in manufacturing employment of ten to twelve thousand. Manufacturing employment in the county increased by more than 9,000 during the past decade, but as will be noted in Part C, over half the increase was created by a single plant--the Kaiser steel mill.

Additions already planned for the Kaiser mill and new industries locating in the Valley, together with new employment opportunities elsewhere in the county, may possibly justify Prof. Spurr's 1960 forecast of 407,000. It should be regarded, however, as a maximum rather than a conservative estimate.

A population forecast for the survey area in the San Bernardino Valley would be extremely difficult to make until the township figures for the 1950 Census become available. If the county population should reach 407,000 by 1960, and if the Valley area still has its 60 % share,

---

* This report is entitled "People, Jobs, and Income on the Pacific Coast, 1949-1960", and the California population estimates are by V. B. Stanbery , Area Development Representative of the U.S. Department of Commerce in the San Francisco Regional Office.

1. POPULATION FACTS AND FUTURE GROWTH, cont'd:

the population of the Valley area in 1960 would be 244,200. It seems probable, however, that the Valley will grow somewhat faster than the rest of the county, for reasons already evident, and that it might have at least 65 percent of the county's total 1960 population. 65 percent of 407,000 is 264,550.

An increase from the present estimate of about 168,400 to a 1960 level of 264,550 would be equivalent to adding new cities of the present size of San Bernardino, Redlands, and Colton to the Valley within the next ten years. Viewed in such tangible form, rather than merely as an abstract figure, the Spurr forecast for 1960 seems all the more clearly a maximum estimate.

If a growth of that magnitude should take place within a single decade, it would create very serious problems of housing, transportation, water supply and sewerage, and other facilities which 96,000 additional people in the Valley would require.

A somewhat more conservative forecast, in the light of all the factors on which future growth depends, would be about 380,000 for San Bernardino County's 1960 population--and even that should be expected only with sustained prosperity and steady industrial expansion. If the Valley should reach 65% of the county total, as suggested above, the 1960 population in this area would be 247,000.

2. TYPES AND TRENDS OF EMPLOYMENT

San Bernardino County's growth until 1940 was chiefly due to the expansion of its extractive industries--agriculture and mining--and the development of its mountain and desert resorts. Conversion industries prior to 1940 were engaged primarily in food processing and manufacturing of building materials. The largest additions to employment opportunities in recent years have come from the establishment of new military bases and the Kaiser steel plant at Fontana.

Since the employment estimates of the State Department of Employment are compiled in San Bernardino County only on a county-wide basis, figures for the Valley area must be projected by the use of such indexes as population of the area, the Census of Business, and the plants established in the area. County total figures are used to show the changing pattern of employment in the entire county brought about chiefly by the changes in the Valley area. The following table shows the changes that have occurred during the 1940-50 decade as well as 1951 employment:

EMPLOYMENT INCREASE IN SAN BERNARDINO COUNTY
April 1940 - January 1951

	April 1940	July 1950	January 1951
Total Employment	49,414	86,975	89,025
Agriculture	9,291	12,100	11,275
Construction	2,840	5,225	4,875
MANUFACTURING	4,976	13,875	14,725
Transportation, Communications & Utilities	5,952	7,675	7,650
Trade	11,572	19,800	19,325
Service	10,214	17,950	18,725
Finance, Real Est. & Insurance	1,204	2,250	2,300
Government	1,688	7,400	9,600

SIZE OF THE LABOR FORCE

As of January 1, 1951 there were 89,025 persons employed in San Bernardino County, and the Department of Employment figures indicated that there were also 5100 persons unemployed, making a total labor force of 94,125--the number of persons working or seeking work at that time. According to these figures, the labor force is a little more than 33% of the total county population. For the State of California as a whole, the labor force is about 40 percent of total population. If the labor force of the county were proportionate to that of the state, there would be a labor force of 110,000 in the county, instead of the 94,125 reported.

2. TYPES AND TRENDS OF EMPLOYMENT, Continued:

While the population of San Bernardino County increased by more than 74 percent between 1940 and 1950, the labor force expanded by only 58 percent. Why is this county's labor force apparently so much smaller than the state average, and why does it lag behind population growth?

There are five possible answers, and all of them apply to the situation in view:

1. The State Department of Employment believes that there may be a general under-estimate in many counties of the number of workers presently self-employed, since these estimates are based on a formula derived from the 1940 Census figures. This category includes farm and small business proprietors and their families, as well as professional and other self-employed service workers.
2. Large numbers of military personnel permanently stationed at various installations in the county have families counted in the population, but military personnel are not counted in the labor force.
3. Many migratory seasonal farm labor families were counted in the 1950 Census but were not represented in the local labor force at the time of the State employment estimates in July.
4. About 8% of the county population, according to the 1940 Census, was in institutions, unable to work, in school, or otherwise out of the labor force. This percentage is higher than in the state as a whole, where this group accounts for only about 5% of the population.
5. Relatively large numbers of residents are retired or living in the county for health reasons, and are therefore not in the labor force.
6. There are relatively fewer jobs for women in the county than in the state as a whole, another factor that would be reflected in a smaller labor force.

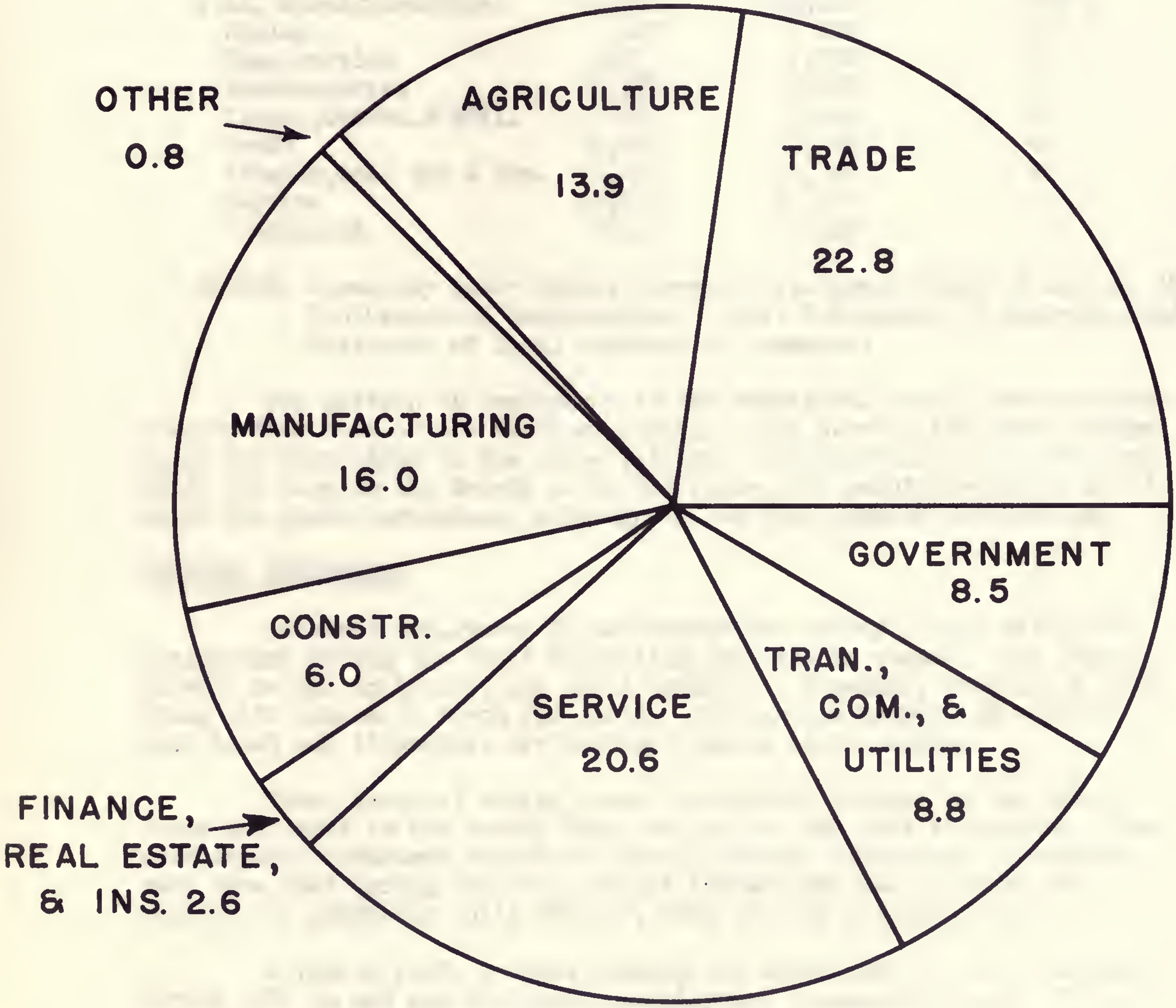
Of all the employment estimates, the figures for manufacturing are probably the most accurate, because there are relatively few self-employed in that category and all workers are covered and reported under Social Security.

EMPLOYMENT IN THE SAN BERNARDINO VALLEY

Employment in the San Bernardino Valley showed a very marked increase in most categories during the past decade. The major changes were due to large increases in government installations, the Fontana

SAN BERNARDINO COUNTY EMPLOYMENT BY PERCENTAGE IN MAJOR CATEGORIES

JULY 1950



TOTAL EMPLOYED 86,975

2. TYPES AND TRENDS OF EMPLOYMENT, Continued:

steel plant, and trade and service expansions serving the larger population. Of the total county employment the following is the estimated portion of non-agricultural employment in the Valley area:

	Estimated Employment as of July 1950		
	County	San Bernardino Valley	Percent of County
Total Non-Agricultural	74,850	46,020	61%
Mining	425	100	23
Construction	5,225	2,900	55
Manufacturing	13,850	9,650	71
Trans.,Commun.& Util.	7,675	5,200	68
Trade	19,800	12,680	64
Finance,Real Est. & Ins.	2,250	1,300	59
Service	17,950	10,250	58
Government	7,400	5,350	72

SOURCE: Community Labor Market Surveys, California Dept. of Employ. 1950; U.S.Census of Manufactures - 1947; U.S.Census of Business-1948; Estimates of local chambers of commerce.

The pattern of employment in San Bernardino County varies considerably from that of the state as a whole. The service and trade occupations are very close to the state pattern. Construction employment runs about the same in the county as in the state, but manufacturing is still below the state percentage, although it has been rapidly catching up.

SEASONAL EMPLOYMENT

Seasonal employment in San Bernardino County occurs mainly in agriculture during the fruit harvesting and packing season. The peach harvest begins in August, and navel oranges in December, reaching a peak along with lemons in March and April. Substantial numbers of workers, both local and itinerant, are employed during these seasons.

These seasonal shifts cause substantial changes in the labor force available in the county from one part of the year to another. The unemployment insurance records of the California Department of Employment show that during 1949 the largest claims load was in March and tapered off gradually until October, when it took a sudden rise.

Appendix Table 3 shows clearly the sharp decline that took place during 1950 in new and continued unemployment insurance claims. It appears likely that there will be a shortage of agricultural workers in the near future as the result of competition for workers between industry and agriculture.

FUTURE EMPLOYMENT OUTLOOK

At the beginning of this section of the report we noted that the prospects for future population growth in the San Bernardino Valley depend to a large extent on the expansion of employment. Let us now take a look at the prospects for future growth in each major employment field.

Agricultural employment will not be greatly expanded because of the already high development of agriculture in this area. The Valley area of San Bernardino County is as intensively cultivated as it is likely to be for some time to come. In California, as in the nation as a whole, the output per farm worker is rising steadily due to increased mechanization. Freight rates which restrict the market for California crops, and the increasing competition of other citrus areas will also tend to limit any expansion of employment in this field.

Employment in construction will continue at a high level. The projected population growth will require new homes, shopping centers, schools, public facilities, and industrial plants, so that construction should continue to provide at least the same proportion of total employment that it does now. Defense requirements, of course, will restrict some types of construction in the immediate future.

Transportation, communication, and utilities is a field which has relatively limited prospects for increased employment. Jobs in communications (telephone, radio, etc.) and in utilities should increase at about the same rate as population growth. Railroad payrolls can be expected to remain at about the same level as at present, with possible moderate expansion due to traffic growth.

Wholesale and retail trade, already fairly well developed, will continue to provide more jobs as total employment expands.

Employment in services and finance will also increase proportionately to total employment.

Government employment, which at the present time accounts for almost 10 percent of all employment in the Valley area, is closely related to national defense, and local population growth. These activities will certainly continue at their present level; probably they will be considerably expanded. The military establishments in this area are largely devoted to basic services of the Air Force, an essentially expanding arm of national defense. County and city payrolls will rise in direct relation to the general growth of the area.

Manufacturing is one of the most promising fields in which to develop the new jobs that will be necessary to support this area's growing population. The future outlook for employment in this field will be discussed in detail in Part C of this report.

PART B--INDUSTRIAL LOCATION FACTORS

1. GEOGRAPHIC LOCATION

Of first importance in the development of any area is its situation in relation to regional, national, and world markets and raw materials. The San Bernardino Valley is not merely an area where 168,400 people live; the Valley and its cities must be considered with regard to their position in southern California, connected by rail and highway with all the growing markets and supply centers of the West.

The San Bernardino Valley is adjacent to the most populous metropolitan area west of Chicago, and is part of a region that produces annually more than a billion dollars worth of agricultural products, about half of California's total. The Mohave Desert to the east provides important sources of minerals, and the San Bernardino National Forest is one of the state's principal mountain resort areas.

One of the elements favoring the expansion of industrial payrolls in the San Bernardino Valley is the increasing trend toward decentralization. The news and advertising pages of the business press give ample evidence of the campaigns being carried on by cities, states, and regions to attract manufacturing plants by taking advantage of this trend. Decentralization in this area is directly related to the availability of basic materials and the growth of the Southern California and western markets. The size and importance of these markets is just beginning to be understood. They are strong magnets for new plant locations, particularly in durable and consumer goods lines which are still relatively underdeveloped in the West.

Plant decentralization is also related to the matter of security, and in this respect the Valley area is favorably situated. The National Security Resources Board in its bulletin--"National Security Factors in Industrial Location"--has stressed the advisability of placing industrial plants in medium-sized cities separated but not remote from metropolitan centers, and with multiple rail and highway facilities. The San Bernardino Valley meets these specifications.

Its location sixty miles east of Los Angeles, on the main routes of railroads, highways, aqueducts, pipe lines, and power lines serving that metropolis, gives the Valley area exceptional basic advantages which industry has already recognized.

Most of these advantages are directly related to the facts of geography on which the past growth of the area is founded, and by which its future growth seems assured.

2. LOCAL AND ADJACENT MARKETS

According to the 1948 Census of Business, the 10 counties of Southern California had total retail sales of more than 6 billion dollars. This was more than 55% of all retail sales in California and 28% of all retail sales in the 11 western states. The Los Angeles metropolitan area accounts for nearly three-fourths of this total. San Bernardino County had total retail sales during the year of $247,188,000, which was third in rank among the 10 counties. Per capita retail sales for the year were about $980 in the county, as compared with a state average of $1,122. (See Appendix Table No. 4).

Wholesale sales for the county, according to the Census, were $142,308,000, out of the Southern California total of more than $6½ billion. Southern California wholesale sales represent 51% of the total California wholesale sales and 22% of wholesale sales in the 11 western states.

The importance of the Los Angeles metropolitan market and the total Southern California market to the San Bernardino Valley is evident. Here we have a very large consumer market that is to be served increasingly by local industry. The increasing number of homes built, of appliances and automobiles produced, of clothing and personal effects needed will expand the market for the products made in the San Bernardino Valley. The San Bernardino Valley is centrally located in the largest single market in the western United States.

INDUSTRIAL MARKETS

California had about 18,000 manufacturing plants when the 1947 Census of Manufactures was completed, as compared with 11,558 in 1939. These establishments require raw materials, semi-finished goods, equipment, and supplies, many of which will be supplied from San Bernardino County sources. At the time the Census was completed, San Bernardino County had 256 manufacturing establishments, many of them producing semi-finished goods for other industrial establishments. In addition to these diversified demands for industrial goods, federal government installations, the railroads, and local government institutions are all heavy users of industrial equipment and supplies.

The importance of the Los Angeles industrial market has long been recognized, but in some respects it is not yet fully appreciated. The ten Southern California counties, with 54 percent of the state population, have about 60 percent of the total manufacturing employment, which is heavily concentrated in Los Angeles County. In terms of steel consumption the Southern California industrial market represents over 45 percent of the total in the seven states west of the Rockies, and this percentage is rapidly rising.

2. LOCAL AND ADJACENT MARKETS, Cont'd:

The advantages of the Valley area as a place from which to serve the industrial markets of the west, and particularly the users of various forms of steel, can best be realized by reference to the types of steel products which will be available from the Kaiser mills.

Present output includes blooms and billets; hot rolled sheets of 3/16 to 4-inch thickness and up to 96 inches in width; merchant and structural material; skelp, continuous weld and electric weld pipe up to 12-3/4 inch diameter; cold rolled sheets and strip up to 16-inch width.

A projected third blast furnace and other major additions to the Fontana plant will provide for the production of wider cold rolled sheets and tinplate.

The types of industries related to the market for steel products are further discussed in Part C of this report.

3. RAW MATERIALS

MINERALS

San Bernardino County is not only the largest of California's counties in land area but it also produces the greatest variety of commercial minerals. Thirty-eight different minerals have been mined and sold commercially at different times. With the exception of petroleum products, the value of minerals produced in this county exceeds all other counties in California.

The following table shows the production values of some of the minerals and lists others that were produced during 1947 and 1948, with the total value for each of those years:

	Value	
	1947	1948
Stone	$ 827,992	$ 1,563,225
Sand and Gravel	1,124,251	1,560,323
Talc	997,446	1,160,255
Lime	328,329	405,411
Clay, raw	232,206	386,355
Lead	45,504	150,002
Zinc	157,300	58,254
Gold	154,315	53,130
Silver	94,009	52,075
Copper	19,320	25,606
Calcium-magnesium Chloride	111,950	167,610
Coke	*	*
Feldspar, crude	*	*
Iron Ore	*	*
Iron, pig	*	*
Pumice	*	*
Salt (sodium chloride)	386,742	*
Tungsten concentrates	*	*
*Unapportioned (boron minerals, bromine, cement, lithium minerals, petroleum, potassium salts, quartz, sodium salts, & items indicated by *	32,220,545	39,058,400
TOTALS	$ 36,699,909	$ 44,640,646

SOURCE: Calif. Department of Natural Resources, Division of Mines.

3. RAW MATERIALS -- Minerals, Continued:

Other minerals with occurrences in the area include antimony, asbestos, borite, dolomite, flourspar, gems, gypsum, lithia, mineral paint, mineral water, onyx, perlite, petroleum, potash, quicksilver, strontium, and turquoise.

It is significant to note that in San Bernardino County, as in California generally, the non-metalic minerals are growing in importance, while most metals are on the decline. This is true in San Bernardino County with the exception of iron ore deposits developed for the Fontana steel mill. Metals produced in addition to iron ore include tungsten concentrates, silver, gold, copper, zinc, and lead.

Increasing industrialization in California and lack of imports during the war years gave impetus to the development of various types of critical minerals. Large-scale construction has brought about great strides in the use of structural minerals. In addition to large production of stone, gravel, and cement, advances have been made in the development of pumise, vermiculite, and other light-weight construction materials.

AGRICULTURAL PRODUCTS

Agricultural production in San Bernardino County and particularly in the Valley area is another important source of raw materials for processing and manufacture. San Bernardino County was the 9th ranking county in the United States in the value of crop production, according to the last Census of Agriculture in 1944.

Citrus fruits are the most valuable crop produced in the Valley area, and in 1948 they amounted to $22 million. They dropped to $13½ million in 1949 due to severe frost damage. A large fruit packing industry, with highly seasonal employment, has developed in the Valley area. The limiting factors in the further development of the citrus industry are lack of water for more extensive irrigation, and the high freight rates which are giving competitive advantages to Florida fruit growers in some eastern markets. The population growth in California, along with the removal of orchards for home construction in the Los Angeles area, will help to compensate for possible further shrinkage in eastern citrus markets.

The second most valuable item of agricultural production in the county is hens' eggs, which the County Agricultural Commissioner reported at a value in excess of 20 million dollars in 1949. The large market in Southern California and its continuing population expansion should bring about a constant increase in the poultry industry.

3. RAW MATERIALS -- Agricultural Products, Cont'd:

The production of field crops, including alfalfa and irrigated pasture, are on the increase. These crops are used for the finishing of feeder cattle brought to the area in preparation for slaughter. The California Crop and Livestock Reporting Service estimated the number of beef cattle in San Bernardino County to be 39,000 as of January 1, 1950. The number of hogs in the county according to this report was 84,000, but this number will be reduced by the abandonment of the large hog ranch near Fontana. California is deficient in livestock products and beef cattle production will have increasing importance.

Milk production in the county was valued at more than $10 million in both 1948 and 1949. The consumer requirements of the Los Angeles metropolitan area will undoubtedly increase as time goes on.

Other crops in the county include the production of wine grapes, walnuts, and potatoes. All agriculture in the county and particularly in the Valley should experience a constant but gradual increase due to the demands created by the growing population of Southern California.

SEMI-MANUFACTURED GOODS

At the present time there are large quantities of semi-manufactured goods produced in the San Bernardino Valley area. Some of these include pig iron, sheet steel, bar stock, structural steel, and a variety of other steel products. In the non-metalics there are large quantities of cement produced in the Valley and in the county. Such products as raw clay, pumice, vermiculite, and many other products are available. A large number of miscellaneous by-products are produced in conjunction with the steel mill operation that lend themselves to further processing.

The industrial applications of these raw materials in the San Bernardino Valley are discussed in Part C of this report.

4. LABOR RESOURCES AND CONDITIONS

The labor force of San Bernardino County, according to the State Department of Employment estimates, was 94,125 in January of this year. The San Bernardino Valley survey area accounts for approximately 60 percent of this total. It includes a wide variety of skills, and provides a source for many types of industrial, service, trade, and agricultural employment.

This area has the advantage of being the thoroughfare for two of the west's most heavily travelled highways into Southern California. The potential residents of the state thus come in contact first with the employment opportunities of the San Bernardino Valley. The Los Angeles labor market, only 60 miles from the Valley, is also a source of skilled technical workers and engineering personnel who may not be available in the local labor pool.

The Valley area has had an excellent record in labor-management relations. There have been no major work stoppages in recent years--except those that were statewide, regional, or national in character. Organized labor is represented in the area by the American Federation of Labor, the Congress of Industrial Organizations and the railway brotherhoods. Labor generally in the area has a relatively high degree of stability. Most workers own their own homes and take an active part in community life.

Wage scales are generally on the same basis as in other similar sized communities in Southern California, with a tendency to be somewhat below the largest metropolitan centers, in line with a somewhat lower cost of living.

The demand for additional workers by military establishments and defense industries is now beginning to cause shortages in some types of labor skills. Currently a large portion of the county's available labor supply is unskilled and consists mainly of agricultural workers. Replacements are currently being met for skilled factory workers such as boilermakers, welders, machinists, and millwrights. A tight labor market exists in some clerical skills including stenographers, and current demands for industrial engineers, draftsmen, and aircraft sheet metal workers may bring about a similar condition among this group of workers. There is increasing competition between agriculture and industry for workers, and it may become necessary to tap the fairly large pool of semi-retired persons as well as women not now in the labor force.

In Part A of this report, in the section on Employment, there is a more detailed discussion of the present and potential labor force in the Valley area.

8. TRANSPORTATION

The San Bernardino Valley is one of the best situated areas in California in respect to transportation facilities. It has three major railroads, good highways and freeways, airports, and interurban bus services. It is well located to handle traffic moving in all directions.

RAILROADS

The area is served by three transcontinental railroads--the Santa Fe, Union Pacific, and Southern Pacific. The city of San Bernardino is a main freight switching point for the Santa Fe and the location of one of its largest car and engine shops.

Colton is the site of the very large icing plant and car shops of the Pacific Fruit Express, where all eastbound perishable rail shipments are serviced. The Southern Pacific classification yard and roundhouse are also located here.

HIGHWAYS

Facilities in the Valley for highway transport are very good and are steadily being improved. The Valley's principal East-West highway is U.S. Route 66, which passes through Cajon Pass to Barstow and Needles. At Barstow it connects with U.S. Route 466 for Las Vegas and Salt Lake City. U.S. Route 60, extending east from Los Angeles, goes through the corner of the Valley area and on to Phoenix. North-South traffic is served by Highway 395 extending from San Diego to Reno. Northbound traffic is also served by U.S. Highway 99, and connecting with Highway 101 at Los Angeles.

Traffic through the Valley from Colton to Ontario moves over a high-speed freeway. When this freeway is extended from Ontario into Los Angeles, the transportation position of the Valley will be greatly improved.

Since the principal market for San Bernardino Valley products is in the Los Angeles area, truck transportation and goood highways will become increasingly important. Los Angeles is now only two hours distant by regular truck lines, and pick-up and delivery schedules are maintained in all parts of the area.

With the increased decentralization of Industry and new truck division terminals, highway transportation will continue to grow in importance in the San Bernardino Valley. This growth will include the warehousing field. Public facilities are available principally in the city of San Bernardino for both cold and dry storage.

AIR TRANSPORTATION

There are seven airports in the area considered in this report. Five of the seven are private commercial fields, one is public, and one military. The Army Air Depot and two private fields are located near San Bernardino; Fontana has one public and one private field; and there are private fields at Rialto and Redlands. No scheduled air lines call at air fields in the Valley at the present time.

Helicopter mail service is maintained between the San Bernardino Post Office and the Terminal Post Office in Los Angeles, and plans are being made to extend this service for passenger use. Flying time would be about thirty minutes.

Private flying is highly developed in the area and will undoubtedly see greater advances. Weather conditions are excellent, with relatively little fog. The size of the county and the extent of mining activities in the desert region makes flying important to the miners both for business and for pleasure.

LOCAL TRANSPORTATION

Some local transportation problems have developed in the unincorporated sections of the Valley. This is particularly true in the widely scattered residential sections near Fontana, where some employers have had trouble attracting workers due to lack of convenient bus service.

Generally speaking the inter-city bus services in the Valley seem to be adequate to handle the traffic demands. Because of the excellent road network the use ofprivate automobiles is more prevalent than in less accessible areas.

6. FUEL AND POWER SUPPLY

ELECTRICITY

Electric power in the San Bernardino Valley is supplied by the Southern California Edison Company and the California Power Company. The city of Colton has its own municipal distributing system.

Rates are generally comparable to the rest of Southern California, which means that they are lower than in most of the eastern industrial centers, though not quite as low as the rates in the cheapest hydro-electric areas of the Pacific Northwest.

Generating capacity is steadily being increased, the latest and largest addition being a 200,000 KW steam plant which is being built at Fontana by the Southern California Edison Company. Present and projected capacity is ample to provide for the existing industrial load and for considerable further expansion.

GAS AND OIL

Natural gas is distributed throughout the Valley area by the Southern California Gas Company. A recent new pipeline, the New Mexico-Texas-California 30-inch line, has been built and greatly augments the Southern California gas supply. This pipeline passes through San Bernardino Valley.

Large industrial users can secure gas for fuel purposes on an interruptible basis. "Firm gas" supply is available for the smaller users, but many of the larger gas consumers probably will have to install standby equipment for the use of propane or fuel oil when gas service is interrupted.

Fuel oil is available in all communities of the Valley area for domestic and commercial purposes.

7. WATER SUPPLY AND WASTE DISPOSAL

The water supply of the San Bernardino Valley comes from the nearby mountains and is distributed from reservoirs and wells by a number of municipal systems and private water companies.

While water sources in most parts of the Valley appear to be sufficient to meet present needs, several communities are facing imminent shortages due to falling reservoirs or sinking water tables. This situation is not peculiar to the Valley area; it is fairly general throughout the state, except in a few northern areas and in metropolitan districts supplied by long-distance aqueducts.

Water engineers have pointed out that the use of water in the populated semi-arid portions of the state is increasing faster than presently available reservoirs and underground water tables can be replenished.

A report issued by the State Division of Water Resources on April 11 indicated that this condition will be aggravated this year by subnormal rainfall and mountain snow packs in the southern part of the state.

Four possible solutions to the water problem affecting the San Bernardino Valley and adjacent areas have been proposed:

1. To obtain water from the Los Angeles Metropolitan Aqueduct.
2. To reclaim and re-use sewage and other waste water.
3. To bring in water from the Sacramento River delta region.
4. To devise means for the large-scale treatment of sea water to make it suitable for domestic and commercial use.

The first of these solutions is the most immediately available, and steps have been taken in the Fontana area to obtain water from the Los Angeles Metropolitan District. Several other communities have had the matter under consideration without taking definite action.

The second solution--the reclamation of water now allowed to go to waste after use, has not yet been adopted on any large scale in the west, except in a few industrial plants, but water engineers believe that it has great possibilities for increasing the available water supply.

The third solution, recently proposed by State Engineer A. D. Edmonston, would require the construction of a 675-mile aqueduct from the Sacramento delta, with tunnels through the Tehachapi and San Bernardino mountains. Though apparently feasible from an engineering standpoint, such a project might be opposed in the northern part of the state, where water shortages are not unknown and where a number of large water-using industries are located.

7. WATER SUPPLY AND WASTE DISPOSAL, Cont'd:

The fourth solution--the conversion of sea water for domestic, industrial, and agricultural use--awaits the discovery of some new method of treatment which can be economically applied on the scale that would be required. Secretary of the Interior Oscar Chapman has just announced that he will ask Congress for $25 million to build an experimental plant to find such a method.

COMPARATIVE COSTS

While accurate figures are impossible to obtain, it has been estimated by federal water engineers that the cost of the four sources of water listed above might be compared roughly as follows:

1. Los Angeles Metropolitan District water from the Colorado River--about $20 per acre foot.
2. Reclaimed water from local sources--$20 to $25.
3. Northern California water by a new aqueduct--about $35.
4. Distilled sea water--no estimate possible at present.

In view of the ultimate limit of the Colorado River as a water source, and the expected further depletion of local mountain and underground reservoirs, it seems probable that before many years the needs of this growing region will compel resort to the second and the third, if not the fourth solution described above. Whatever solutions are adopted, water will become more costly in this area, as it will in many other sections of the United States for similar reasons.

WASTE DISPOSAL

The cities and major industries in the Valley have installed sewage and effluent disposal plants of various types to meet their respective needs. Some of these plants are not adequate for the increasing loads that must be expected as the area develops, and additional facilities will be required. In the unincorporated Fontana area where individual septic tanks are chiefly used, the need for proper sewerage is particularly urgent.

Sanitary districts can partially meet this need in the Fontana district and other portions of the Valley. City incorporation, as discussed on pages 34 and 35, is another remedy that is available. Large-scale industries outside corporate limits will probably continue to provide their own waste disposal facilities.

8. LOCAL GOVERNMENT SERVICES AND PROBLEMS

Every present and prospective industrialist, as well as every individual citizen in the Valley area is vitally concerned with the services, regulations, and costs of county and city government. These factors often play a decisive part in the location and growth of manufacturing and commercial enterprises.

The success of local government in meeting the particularly difficult problems of recent years is reflected by such things as the condition of roads and streets, water and sanitary services, traffic control and police protection, insurance rates, zoning, and many other phases of public housekeeping.

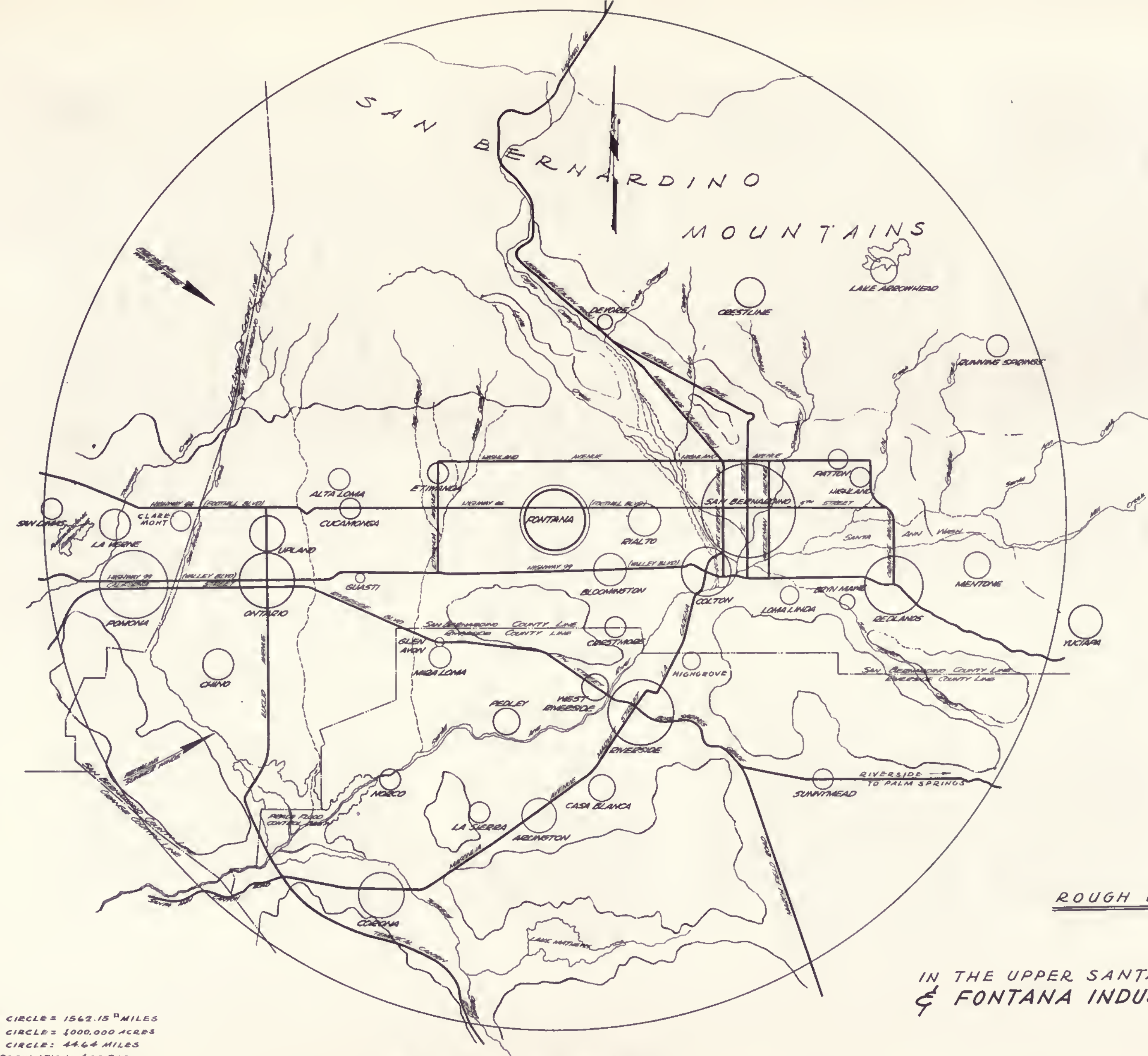
The adequacy and efficiency of all these services must be taken into account when tax rates in different counties and cities are compared. For this reason, and also because assessed valuations and tax rates change from year to year, figures are of little value for comparative purposes without exhaustive analyses. From the viewpoint of the industrialist, tax rates are always considered in the light of what services are essential and how well they are performed.

The tasks of local government in San Bernardino County and the Valley communities have become more difficult with the rapid growth and changing character of the local economy. The county government must provide for the needs of the most extended single county in the United States, in which are located, at widely separated points, large concentrations of residential, industrial, and military activities. City governments must serve the increasing needs of their growing populations, handicapped by rapidly rising costs in every department. Under these difficult conditions local governments in the county and the Valley may be said to have done a generally excellent job. It is surprising that there are not more unsolved problems than there appear to be. It is also surprising that budgets and tax rates have not risen higher.

CITY, COUNTY, AND REGIONAL PLANNING

One of the most pressing problems arising from the growth of a city or an area is the proper designation of the uses of the land. This is the particular responsibility of the county and city planning commissions, and their work is therefore of vital importance to industrial development.

The present zoning ordinance of San Bernardino County was adopted in 1937. An extensive revision of it, prepared by the County Planners Commission, is now being reviewed for adoption. Writing a zoning ordinance that will meet the needs of the immense area and the varied land uses of this county is an extremely difficult task. In the Valley



ROUGH DRAFT STUDY

IN THE UPPER SANTA ANA RIVER BASIN
& FONTANA INDUSTRIAL COMPLEX

AREA CIRCLE = 1562.15 □ MILES
AREA CIRCLE = 1000,000 ACRES
DIAM. CIRCLE: 44.64 MILES
EST. POPULATION: 400,210.

PRELIMINARY

PREPARED BY THE
ASSOCIATED PLANNING AGENCIES
JULY 17 1950

8. LOCAL GOVERNMENT, Cont'd:

the problems arising from competing uses of the land have made zoning doubly difficult. Local zoning ordinances, however well drawn, involve the planning commissions in many demands for zone changes and variance permits wherever there is rapid population growth, and this is particularly true in the unincorporated areas, Some residents of these areas are inclined to oppose the whole idea of zoning, which they consider a restriction of personal freedom that should be imposed only in cities.

For industrial firms, whether in cities or outside them, zoning is of vital importance for the protection of plant investments and the assurance of approval for necessary expansion. For the residential community proper zoning within the corporate limits and in the fringe territory is essential to the maintenance of home values and civic development. For the business man, proper zoning of commercial districts is equally important. For the orchardist and farmer zoning is likewise necessary if his interests are to be conserved. But in areas like the San Bernardino Valley, with rapid expansion of all activities taking place, it often happens that the citrus grower, the subdivision agent, the industrialist, and the merchant all want the same piece of land, or want to change a piece of land from one use to another.

Recognizing that these problems should be met on an area-wide or regional basis, planning technicians of the Valley and surrounding communities have formed an unofficial group called the Associated Planning Agencies. They have approached the problem of land use planning with the idea that the largest concentration of industry will be in the vicinity of Fontana, and they have mapped a circle about 45 miles in diameter, with Fontana as its center, in which they believe a master plan of land use should be developed. Their rough draft map of this area is reproduced on the preceding page.

Whether this particular area or some smaller area is designated, the desirability of unified planning in the Valley seems obvious, and this can be accomplished, with or without an Area Planning Commission, by close cooperation between county and city planning agencies. Only on this basis can proper allocations of acreage for various uses be made. Colton, for example, has recently re-zoned its industrial areas and considerably enlarged them to provide for future needs. San Bernardino, which now has nearly 1500 acres of industrially zoned land, will probably revise its allocations also. Redlands, with a very large incorporated area (17.2 square miles) in proportion to its population, has 800 acres of industrial property on its present zoning map. Revisions, when they are made, should be based on the expected industrial expansion of the Valley area as a whole, including the very large acreage of potential factory sites in the Fontana district, where zoning has not yet been completely applied.

8. LOCAL GOVERNMENT, Cont'd:

Perhaps the most pressing problem of local government in the Valley Area today is the recent rapid growth of the Fontana community to a population of some twenty to twenty-five thousand without benefit of municipal government. Special efforts have been made by the county government, and by local citizens' groups, to provide for some of the most urgent needs of this suddenly large community, but the only satisfactory solution is the incorporation of a city in this portion of the Valley area. Steps toward this essential arrangement are already being taken, and a successful outcome of these efforts is to be hoped for.

Present arrangements are makeshifts at best, and to provide adequate services and facilities without incorporation would be more costly than incorporation itself, as many studies of similar cases have shown. The incorporation of Fontana as a city will encourage investment, facilitate home financing, generally protect local living conditions and make Fontana a better place in which to live.

The growth of industry in San Bernardino County has been greatly aided by a county government and a Board of Supervisors that is aware of industries problems, and knows the importance of industrial payrolls in the local economy.

9. HOUSING FACILITIES

Preliminary returns of the 1950 Census show that San Bernardino County has 105,797 dwelling units, or 67.5% over the number in 1940. This substantial increase was about 14% below the 1940-1950 increase in population. Similar gains were noted in both San Bernardino City, which had a 1950 total of 21,407 dwelling units or 50.4% over 1940; Colton which had 4,411 units or a gain of 64.8%; and in Redlands where there were 6230 homes, or a gain of 28.9% during the decade. No release has been made on Fontana or other unincorporated areas.

A special tabulation was prepared for the San Bernardino Housing Authority of substandard housing in the San Bernardino township, the city of Redlands, and for Colton and the Colton township. A dwelling unit is considered substandard if it is dilapidated or does not have flush toilet and bath. The absence of hot running water in a unit classes it as substandard in most instances. There was a total of 3,094 such units in San Bernardino and the San Bernardino township, 820 in Redlands, and 882 in Colton and Colton township. This would indicate that the Colton area has between 15% and 20% substandard dwelling units, San Bernardino township from 12% to 15%, and about the same in Redlands. There is a large relatively new Public Housing project in the city of San Bernardino.

Although figures are not available at the present time on the Rialto and Fontana areas, the housing is relatively new and percentages in the substandard classification may be somewhat lower. About 25% of the 42,622 new dwelling units constructed in the county were located inside the cities of San Bernardino, Colton, and Redlands.

The 1950 preliminary census of housing showed an average of 2.67 persons per dwelling unit. There has been a continuing decline in occupancy per unit since the turn of the century.

The rapidly expanding population means that the demand for new homes will continue high. If the present ratio of occupancy per unit should continue during the next decade, along with the high population increase expected, the Valley area will require between 2,800 and 3,500 new dwelling units per year.

HIGH HOME OWNERSHIP

The percentage of owner-occupied dwellings has always been high throughout the Valley, and recent conditions in the residential building industry have tended to make it even greater. Rental housing is particularly scarce in the Fontana area, and there is only a limited prospect of meeting this deficiency in the immediate future.

10. LIVING CONDITIONS

In bidding for new industrial payrolls almost every community from Maine to Texas calls attention to its superior living conditions--ideal climate, excellent schools, unique recreational facilities, and varied cultural interests. Carefully selected facts can be set forth to show that any spot in the country, regardless of latitude, elevation, or surroundings, is a desirable place in which to work and play.

The merits of the San Bernardino Valley in this respect are well and widely known, as is evident from the great influx of population into this area. For the purposes of the present survey the living conditions in the Valley can be briefly summarized as follows:

CLIMATE

The climate of the San Bernardino Valley is generally similar to that of the Los Angeles area, except that it is warmer in summer and has less fog than the coast. The average rainfall is about 16 inches, concentrated mostly in four winter months. Monthly average temperature ranges are 37 to 67 degrees in January, and 57 to 96 degrees in July. Midday temperatures exceed 90 degrees on about 105 days in the year, and reach 100 on about 30 days, accompanied by low humidity. Nights are relatively cool, especially in the foothill areas. Average length of the growing season is 253 days.

In the adjoining San Bernardino Mountains there are fairly cold winters with considerable snow, warm summer days, and cool summer nights.

RECREATION

With a pattern of year-round outdoor living, and with the lakes and forests of the San Bernardino Mountains close at hand for summer and winter sports, the Valley area enjoys the additional advantage of having within a sixty-mile radius a great variety of other recreational resources. Among them are Palm Springs and other desert resorts, the ocean beaches of the Orange County coast, and the communities of Los Angeles, Hollywood, Glendale, Pasadena, Ontario, Santa Ana, Anaheim, and many others. The city of Riverside, with its unique attractions, is just across the southern county boundary.

Public and private golf courses, swimming pools, stadiums, outdoor theatres, and all the other usual types of recreational facilities are available in the Valley area.

The National Orange Show at San Bernardino is an annual event of outstanding interest, and provides valuable publicity for the Valley, attracting attendance from many parts of California and nearby states.

10. LIVING CONDITIONS, Continued:

EDUCATION

The county and city school systems in the Valley rank high in a state that is noted for good schools. In addition to the elementary and high schools there is the San Bernardino Valley College, a two-year public junior college with an enrollment of over 1,000. The University of Redlands is a private, fully accredited liberal arts college, with an enrollment of about 1,200.

As in other fast-growing areas, the school districts of the Valley have had to plan for many new buildings and classrooms to meet their mounting needs. Enrollment in elementary schools has more than doubled in some districts, and two-shift sessions have been necessary in several instances. Extensive building programs, supported by special bond issues, are being undertaken in most sections of the Valley.

CIVIC AND RELIGIOUS ORGANIZATIONS

Churches of practically all denominations, civic and fraternal organizations, and groups of all kinds are to be found in the Valley area. There is also a wide variety of cultural associations with special events at all seasons of the year. Evening courses of many types are offered by the adult education divisions of the schools and colleges.

11. BUSINESS, PROFESSIONAL, AND ENGINEERING SERVICES

Many specialized facilities are important in a community if its residents and its industries are to be adequately served. How well are the communities of the San Bernardino Valley provided with banks, insurance, realty and accounting firms, contractors, newspapers, legal and medical services, and engineering, maintenance, and repair facilities?

Most of these services are conveniently available in all the Valley communities. Appendix Table 5 shows the employment and establishments in the service and finance classifications.

Engineering and accounting firms are particularly concentrated in the city of San Bernardino. In addition there are contractors specializing in all types of construction and installation. Machine shops, tool and die makers, and mill supply houses are also established in this area.

In addition to the local service facilities, those in the Los Angeles area are readily available, and they are the most complete to be found in the west.

NEWSPAPERS

The Valley is exceptionally well served by newspapers in each of its communities. In San Bernardino are located two dailies--The Sun and the Evening Telegram--both published by the Sun Publishing Company and having a very wide circulation. Redlands is served by the Redlands Daily Facts; Colton by the Colton Courier; and Fontana is served by two papers--Fontana Herald and News, a semi-weekly, and the Fontana Shopping News. The papers all have progressive managements who are interested in the progress of their respective communities. Los Angeles daily papers also have large circulations in the Valley area.

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12. INDUSTRIAL SITES

The number of industrial sites that are available in the Valley area; how they are situated as to city services and utilities, rail and highway transportation, drainage and footings, zoning and building restrictions; the prices and terms at which they can be leased or purchased; these are the final considerations that determine the extent of an area's industrial growth.

In earlier days it was assumed that any piece of level land near a railroad, a highway, and a power line, in an unrestricted zone outside the city limits was a potentially good plant site. A few large industries are willing to acquire such sites and install their own facilities for water supply, drainage, fire protection, and other necessary services. Most of the San Bernardino Valley's industrial prospects, however, will be firms seeking to lease or purchase property on which these facilities are ready at hand. Even large-scale manufacturers usually prefer sites where complete municipal services are available. And since most location seekers will be considering several different areas, they will be inclined to go where suitably developed sites are obtainable on the most favorable terms.

COMPETITIVE AREAS

In Orange County, which is an alternative choice for many of the Valley's industrial prospects, the location factors reviewed in the preceding pages add up about as well as they do here. Some of them favor Orange County--some favor this area. Certain raw materials are more available here, for instance, and certain aspects of transportation may be better. But to some industrial firms the geography of Orange County and its slightly closer proximity to Los Angeles are desirable features. In the matter of plant sites, Orange County also has offered attractions equal to what has thus far been available in the Valley area.

Many of the industrial firms that have established new plants in California in the past five years have reported that the availability of good plant sites was the decisive factor in their choice of a location. The industrial committees of the Valley chambers of commerce, in cooperation with railroads, property owners, and realtors should take steps to insure that such plant sites will continue to be available.

The efforts made in San Bernardino several years ago to establish a central improved manufacturing district received wide publicity. When the eastern industrialists who helped to promote and who largely controlled the project finally decided not to build their plant here, the development of the property was discontinued and it was eventually sold for a residential subdivision. While this turn of events had no connection with plant location factors here, it tended to create misgivings in some quarters as to this area's industrial advantages.

12. INDUSTRIAL SITES, Continued:

In many other places the planned manufacturing district has proven to be a highly successful means of attracting substantial industries, and there is no reason why this device should not be considered for future use in the Valley to keep it in a competitive position with other areas.

A very important part in the development of plant sites is played by realtors who are familiar with manufacturing requirements. The Industrial Section of the San Bernardino Real Estate Board and realtors in other Valley communities have been active and effective in locating plants here.

LARGE AND SMALL PLANTS

A major industrial site project has recently been undertaken by the W. Ross Campbell Company, a long-established realty firm which assembled most of the property for the Los Angeles Central Manufacturing District. The company has about 8,000 acres of level land under option or agency contract, adjacent to the 1,600-acre Kaiser mill property, and is offering industrial sites for sale on an attractive basis. The property is on the Southern Pacific, Union Pacific, and Santa Fe; it is crossed by the Los Angeles Metropolitan Water District's Colorado River aqueduct, the Hoover Dam transmission line of the Southern California Edison Company, and the 30-inch New Mexico-Texas-California pipe line of the Southern California Gas Company. 200 acres of the new industrial property has been acquired by the Southern California Edison Company for its new $30 million dollar steam generating plant.

The successful record and wide contacts of the W. Ross Campbell Company give assurance of substantial results in this large-scale project. Other sites of adequate extent for major industries are available in and adjoining San Bernardino and Colton, while there is considerable property in Redlands and vicinity suitable for plants of medium and smaller size.

There is no complete listing, however, of the essential data for all the industrial sites in the Valley area, and relatively few of them are adequately zoned or definitely priced. Firm pricing is almost as important in the marketing of industrial property as in residential lots, particularly where smaller plants are concerned. The matter of zoning has already been discussed under the heading of local government in this section of the report.

PART C--PRESENT AND POTENTIAL INDUSTRY

Before entering into a detailed discussion of industry in the San Bernardino Valley, it may be well to define the meaning of the word industry as here used. In state and federal publications, as well as in every day conversation, industry means a wide range of economic activities. There is the tourist industry, the railroad industry, and the construction industry--but none of these are industries in the sense that is now meant. In this portion of the report, and in Chamber of Commerce usage, the term industry is applied only to manufacturing activities.

MAJOR TYPES OF INDUSTRY

All manufacturing activity is divided into 21 major types in the Standard Industrial Classification Manual published by the U.S. Bureau of the Budget. The complete list is as follows:

- Food Processing
- Fabricated metals
- Lumber and wood products
- Printing and publishing
- Stone,clay & glass products
- Machinery (except electrical)
- Petroleum products
- Furniture & Fixtures
- Chemicals
- Transportation equipment
- Primary metals
- Apparel
- Textile mill products
- Scientific instruments
- Ordnance & accessories
- Tobacco products
- Paper products
- Leather products
- Rubber products
- Electrical machinery
- Miscellaneous manufacturing industries

FOUR INDUSTRIAL GROUPS

In considering which of these major types of industry are most likely to be attracted to the San Bernardino Valley, we may first take a look at the four broad groups into which all industries are usually divided:

(1) Raw material-centered industries, which must be located close to the source of their principal raw materials. Lumber mills and canneries are examples of this type.

(2) Market-centered industries, which must be located close to large consumers of their products. Auto assembly plants and can factories are examples of this type.

(3) Labor-centered industries, which must be located where particular labor skills are obtainable. Textiles are examples of this type. It should be noted, however, that World War II revealed that most skills can be very quickly learned, and also that key personnel will move to any location where there are jobs to be had. If a manpower shortage should develop under war conditions, of course this situation would be radically changed.

FOUR INDUSTRIAL GROUPS, Cont'd:

(4) "Foot-loose" industries, with raw materials and products not heavy or bulky enough to make freight costs serious, and with relatively simple labor requirements. Small appliances and certain kinds of light wood products are examples of this type.

It will be helpful to keep in mind the broadgroups of industry listed above, to simplify our analysis of this area's future industrial possibilities. These basic types of industry are not completely separate and distinct. Some industries are both raw-material and labor-centered, or raw-material and market-centered. Comparatively few industries can be considered as entirely "foot-loose" in their choice of a location.

Keeping in mind the location factors described in Part B of this report, we can see which of the four basic groups will be most likely to expand in the Valley area:

- Raw material-centered industries supplied by the Fontana steel mill have great possibilities of future growth. While there is room for some additional food processing in the area, no spectacular expansion appears likely. Mineral potentials in the adjacent desert area are very difficult to estimate, though some stimulation of mining activities may take place under the defense program.

- Market-centered industries have an outlook that is related directly to western population growth, but the competition of other areas for these industries will be keen, and several of this area's advantages are somewhat limited at present, as discussed in Part B of this report.

- Labor-centered industries in this area are in a relatively favorable position, because of its large labor force, which provides a wide range of special skill and experience. But this situation can change quickly if the military bases and present industrial plants expand rapidly in a period of general tight employment.

- Foot-loose industries have extensive possibilities here, though competition for them is also increasing as small communities go after them aggressively, while metropolitan centers try to keep the industries of this type that they now have.

Returning now to the twenty-one major industry types in the Standard Classification List, let us see how many of them, including the ones already established here, fit the location factors of the San Bernardino Valley area as described in Part B of this report.

MAJOR TYPES ALREADY ESTABLISHED HERE

Looking over the 21 major industrial types, it is apparent that two of them, for lack of raw materials, do not fit the Valley's location factors, and that the other nineteen are suitable to a greater or less degree. The two exceptions are:

Petroleum Products
Tobacco Products

5 other major types are already represented here, with an employment of 500 or more. These 5, in the order of their importance, are as follows:

Primary Metals
Stone, Clay, & Glass
Food Processing
Printing and Publishing
Apparel

8 other major types are represented to a lesser degree. These are listed without regard to their relative importance, since accurate employment figures are not available for all of them:

Lumber and Wood Products
Chemicals
Furniture & Fixtures
Electrical Machinery
Other Machinery
Fabricated Metals
Transportation Equipment
Miscellaneous Manufacturing

The remaining major industry types, according to the latest figures available, are not significantly represented in this area:

Textile Mill Products
Scientific Instruments
Ordnance and Accessories
Paper Products
Leather Products
Rubber Products

While all of the above listed industry types, except the first two noted, are generally suited to the location factors of the San Bernardino Valley area, it does not follow that they should be expected to develop here in equal degree. These major industry types do not mean a great deal until they are broken down into the 475 detailed categories in the Industrial Classification List.

293 SPECIFIC INDUSTRIES

Going through all of the 475 detailed categories under the 21 major groups--except those already noted as unsuitable--and checking them against the location factors described in Part B of this report, there appear to be 293 specific manufacturing industries that could logically be located in the San Bernardino Valley area, including the ones that are already here. These 293 are divided among the major industry types as follows:

Major Manufacturing Classification	No. of Industries	Major Manufacturing Classification	No. of Industries
Ordnance & Accessories	8	Leather & Leather Products	8
Food & Kindred Products	23	Stone, Clay & Glass Products	24
Textile Mill Products	14	Primary Metal Industries	17
Apparel	30	Fabricated Metal Products	28
Lumber & Wood Products (except furniture)	6	Machinery (except Electrical)	25
Furniture & Fixtures	11	Electrical Machinery, Equipment & Supplies	14
Paper & Allied Products	6	Transportation Equipment	9
Printing, Publishing & Allied Industries	11	Professional, Scientific & Controlling Instruments; Photo & Optical Gds; Clocks & Watches	7
Chemicals & Allied Prod.	26	Miscel. Manufacturing Indus.	23
Rubber Products	3		

The complete list of these industries appears in the Appendix of this report.

Not every one of these 293 specific industries is equally well suited to this area's location factors, and some of them will be better suited when certain factors are improved. It must also be kept in mind that certain industries are more likely prospects than others because their lines of business are expanding more rapidly.

Thus the list in the Appendix must be regarded as a basic reference list rather than one that is ready for direct promotional use. Attention will be devoted in the follow-up phase of this survey to screening the list for selective concentration.

A UNIQUE OPPORTUNITY

The San Bernardino Valley is the site of one of the two basic steel-producing plants in the West--the other being at Provo, Utah--and the establishment of the Kaiser steel mill at Fontana has created a unique opportunity to attract industries using the products and by-products of this primary source of supply.

Because of the importance of this development, the principal industries affected by it are discussed in detail on the following pages.

STEEL-USING INDUSTRIES

One of the growing fields of steel fabrication that is most likely to bring new industries to the San Bernardino area is motor car and truck assembly. While west coast assembly plants are already using large quantities of western-made wheels, springs, bumpers, small die castings, and other parts, this activity is still in its infancy. Among the other components which are just beginning to be produced on the west coast are brackets, panels, decks, seat frames, shackles, and other items, most of which can be stamped or formed in simple operations with wide tolerances. These items add up to a total tonnage equalling or exceeding the body and fender stampings in most types of cars. It seems unlikely that these larger stampings will be made on the west coast in the near future, because the great cost of the required equipment will keep production centralized in the present eastern plants. Other items are not thus limited.

While automobile assembly offers one of the major industrial markets for new steel fabrication in the San Bernardino Valley area, there are numerous other industrial products which lend themselves to increased production here. The immediate expansion of steel-using industries will of course be largely dependent upon the requirements and limitations of the national defense program, and that program may call for the establishment of some new plant facilities in this area.

For the longer range future, the continuing growth of the Los Angeles industrial market, which is already dominant in the far west, will undoubtedly attract many types of steel-using plants. They will find here the combined advantage of a location which is close to their principal market as well as their source of supply.

In the manufacture of consumer goods using steel as a major material, the normal expansion of manufacturing in this area might be a little less rapid. The wholesale purchasing and distribution of many steel consumer items is still highly concentrated in the east and middle west, and few large-scale manufacturers have established western plants.

An example of a large-scale steel fabricator drawing raw materials from the Kaiser plant and serving the industrial market is the Taylor Forge Company, making wrapped steel pipe, heavy forgings, and other steel products.

Thus far there is no equally important example of a consumer goods manufacturer using steel from the Fontana mills and locating in the immediate vicinity. The prospect for such a development will be increased when the new sheet and tin plate facilities are added to the facilities of the Fontana mill. Kitchen ware and metal toys are among the types of consumer goods manufacturing which might then be attracted to this area.

BY-PRODUCT INDUSTRIES OF STEEL

In addition to the manufacture of various steel products in plants that can be supplied from the Kaiser mills, there are prospects of a considerable development of industries using by-products of the steel mills as raw materials. These by-products include slag, gases, and liquids that are major ingredients in a wide range of manufacturing processes.

Two examples of by-product manufacture can be cited--the Fontana Mineral Wool Company, using slag as a raw material, and the newly announced plant of the Koppers Company of Pittsburgh, which will make enamel pipe coatings and roofing materials from tar pitch. Dow chemical and other companies are already using all the liquid by-products that are available, and negotiations are under way for the industrial use of waste gas.

Among the other by-products which have important industrial uses are coke screenings, flue dust, calcium carbonate, open-hearth slag, sulphur, waste pickling acid, crude phenol, sulphate salt, and light oils. Some of these by-products are now being shipped to industrial plants outside the Valley area, but others are of such a nature that they can best be utilized at their source.

OTHER MINERAL INDUSTRIES

San Bernardino County's extensive mineral deposits, located for the most part in the desert areas east and north of the San Bernardino Valley, have been described in Part B of this report under the heading of Raw Material Resources. Many of these minerals have important uses in western industry. Some of them support large manufacturing plants at the source of supply, like the potash, soda, and borax plant at Trona. Others are shipped to various manufacturing plants in Los Angeles and elsewhere. A large cement plant at Colton is the principal production unit using natural raw materials in the immediate Valley area.

Some further local development of mineral-based industries can be expected, though it is unlikely that there will be any great change from the general pattern now established.

The steel and mineral-based industries that could logically be located in the San Bernardino Valley are among those listed in the Appendix under 8 of the 21 major types. They are:

Fabricated Metals
Chemicals
Electrical Machinery
Other Machinery
Transportation Equipment
Stone, Clay, and Glass
Furniture & Fixtures
Miscellaneous Products

FOOD PROCESSING INDUSTRIES

Next after the types of industry described on the preceding page, food processing provides the largest number of industrial jobs in San Bernardino County today. Further expansion is likely to take place in this major field, mainly because of the growth of the Southern California market for local food products. These products have been described in Part B of this report. While the citrus industry may have almost reached its peak, further expansion of the poultry, meat, and dairy industries may be expected, particularly in the Valley Area.

INDUSTRIAL "STATUS" OF THE VALLEY AREA

Some of the specific industries under the headings listed on the previous page will be drawn to the Valley by attractions not directly connected with steel or mineral resources. One of those attractions is the diversity of industry and industrial service already established in the area. Another is the combination of roomy plant sites and good transportation to be found here. Still another attraction is the cooperative attitude of local government agencies familiar with industrial needs. These attractions, discussed in detail in Part B of this report, are due in part to the relatively mature status of the Valley as an industrial area. Communities which have never had manufacturing activities find it difficult to attract industrial payrolls, regardless of the basic advantages they can offer. Industrialists tend to locate new plants where some related manufacturing operations are already established, and they are strongly influenced by the success of those operations in a particular area.

One of the strongest inducements for bringing new plants to the San Bernardino Valley is the wide range of manufacturing activities already located here. These existing enterprises and their many suppliers, distributors, and customers are a valuable source of contacts with new industrial prospects for this area.

MARKET-CENTERED INDUSTRIES

Thus far in this section of the report we have been discussing industries that are for the most part raw material-centered, and it seems probable that this group will always comprise the largest manufacturing payrolls of the Valley area. It must also be pointed out, however, that the location factors of the Valley area are well suited to many categories of market-centered industries, some of which are already represented here. The market opportunities available here were described in Part B, and they are second only to Los Angeles County in the entire west. In some cases the slight distance advantage of a Los Angeles County location may be offset by more desirable and less costly sites and living conditions in the Valley area.

"FOOT-LOOSE" AND "OFFICE" INDUSTRIES

Among the industries that are increasingly seeking locations outside large metropolitan centers there are many of the so-called "foot-loose" type that should be attracted to the Valley area. Prominent in this group are the "paper-work" departments of insurance companies and similar service organizations, the circulation and accounting offices of publishing firms, and other enterprises which have extensive office operations.

The movement of such activities to the smaller communities was the subject of a special management survey in the March 17, 1951 issue of BUSINESS WEEK, which described recent developments along this line in the vicinity of New York. Similar moves have occurred extensively in Colorado and other states, and are beginning to take place in the San Francisco and Los Angeles areas.

THREE SOURCES OF NEW PLANTS

The mere compiling of a list of industries that appear to be suitable for the San Bernardino Valley area does not, of course, provide an adequate basis for a program of industrial development. We must also consider the three sources from which new industries might come, and which of these three sources will be most promising to look into.

There are just three sources of new industrial plants that might be established in any of the Valley communities:

1. Branch Plants of national or regional firms expanding their production activities.
2. Removals of main plants from present locations elsewhere.
3. New industrial enterprises organized in San Bernardino County.

Much of the industrial growth of the west has been in branch plants, and this has been true in the Valley area. Further additions to the branch plant list may be expected, and efforts to attract them should be vigorously pursued.

Main plant removals from one area to another are likely to be somewhat restricted in the present defense period, due to construction and material problems. This situation will affect the types of industry likely to be interested in the Valley area, but it should not prevent local city chambers from making contacts which will lead to plants moving into the area when conditions permit. The trend toward decentralization from large metropolitan centers has mainly affected suburban areas closer in than San Bernardino County, but there are a number of market-centered and "foot-loose" industries that can move further out.

The outlook for new plants from each of the three sources listed above will be examined on the following pages.

BRANCH PLANTS*

A considerable part of the San Bernardino Valley's industrial employment is provided by branch plants of firms which have major manufacturing operations elsewhere in California or in other states. Such branch plants are not peculiar to this area, but the fact that they are located here calls for a brief analysis of the factors which have led multi-unit firms to consider their establishment.

Two important facts should first be noted. First, the location of branch plants is more closely related to local economic factors than is the location of manufacturing plants in general. Second, the location of a branch plant depends not only on these basic factors but also on the relation of the branch to the rest of the firm's operations, both as to location and to production characteristics. The first of these facts points up the importance of sound factual information in dealing with multi-unit firms which may consider branch plants in the Valley. The second indicates the necessity of keying the local data to the specific set-up and policy of the individual company.

Two types of production are recognizable for San Bernardino Valley branch plants. In the first, the branch is necessary if the firm is to secure local raw products for plants under its own control and operation, while in the second, branches are necessary if the firm is to serve the local area market.

Most branch plants are market-oriented, since they are located to serve the market rather than to secure raw material supplies. This is best illustrated by plants manufacturing milk cartons and other containers, which, because of bulk, cannot be transported economically over long distances. These plants are of course related to the industrial market--canneries, dairies, etc.--rather than to the consumer market.

Some branches are located to utilize local raw materials, while others are located to serve local consumer or industrial markets, or to be near other plants of the same firm. In addition, though not particularly evident in this area, branch plants located with respect to markets tend to locate in one of the largest market concentration areas rather than in a less concentrated area which may be nearer the geographic center of the whole territory served.

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* This analysis of branch plants was prepared by Andrew H. Trice, who has made an intensive study of more than 1100 branch plant operations in California over the past nine years, in connection with graduate studies at the University of California.

BRANCH PLANTS, Continued

As for relatively footloose industries, which are compelled neither by raw materials nor local markets to locate near one or the other, future locations may be increasingly outside of major cities and even outside of major industrial areas. Examples of this tendency are fairly commonplace with respect to industry in general, as well as in branch plant locations.

PATTERNS OF BRANCH PLANT DEVELOPMENT

What are the factors which favor San Bernardino Valley as a branch plant location? What factors will have the greatest influence in the future? The substantial consumer market both in the immediate vicinity and in the jobbing territory served from Los Angeles are of primary importance to future developments. These factors will probably continue to be paramount, in view of the greater exploitation of mineral resources in the county, the changing patterns of agriculture, and the growing consumer and industrial markets.

Five principal ways in which branch plant industries adapt themselves to these changes are as follows:

a. Branches already in operation expand their activities to better serve the market or to better utilize the new or increased raw material resources. Typically, a branch plant performs only a few of the processes and produces only a portion of a firm's whole range of products, and in most cases it operates on a smaller scale than the major plant.

b. New branches are established in the Valley area by some firms now operating branch facilities elsewhere in California, to serve the growing makret, while other firms already operating branch plants in this area will establish new branches to supplement those already established.

c. Likewise, some California firms with single plants reach out to the enlarged markets and new material and labor resources by establishing branch plants in the San Bernardino Valley.

d. Some branch plants are relocated from areas of congestion in order to secure more ample space, and to improve the relation of the plants to the changing distribution pattern or the company's competitive position.

e. Out-of-state firms seeking to serve an extensive market, or whose products are related to the industries of southern California investigate the locational possibilities of several local areas, including the San Bernardino Valley.

PATTERNS OF BRANCH PLANT DEVELOPMENT, Cont'd:

These five types of development can be illustrated with specific examples either in southern California or elsewhere in the state. Branch plants of many kinds have been established on a small scale with limited processes and product ranges, and have been later expanded in size, processes, and product range. Many multi-unit national firms already operate two or more branches in California and may be expected to establish additional units. Branch plant relocations are not uncommon, and they are more and more being made from centers of heavy concentration to areas not at present highly industrialized. Finally, there are several fairly recent cases of branch plants being established in the San Bernardino Valley area by national firms, and these will encourage others to explore the local possibilities when thinking of new branch plants.

The best prospects for branch plants are among national or California manufacturers already selling in the Valley market, particularly those having distributors or branch sales offices here. The history of California branch plants shows that in nine out of ten cases branch manufacturing is preceded by sales experience in the territory. To explore these possibilities, a list of firms with sales offices or distributors in the area would be a good starting point. Careful analysis of location factors, described earlier in this report, would indicate whether a particular firm could logically be expected to establish a plant here.

DEFENSE EXPANSION

In view of the record-breaking plant expansion in prospect for 1951, occasioned by defense production requirement,* it is possible that some large-scale branch plants may be located in the Valley area without regard to the normal expansion patterns above described. The location factors of this area are particularly favorable for many types of branch plants which might not be justified at this time by the size of the civilian market, but which might be immediately devoted to defense production.

Such defense plants, which might be established here because of available power, transportation facilities, raw materials, or adequate sites, could be expected to become permanent assets to the area through eventual conversion to civilian production.

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* This plant expansion program is the subject of a special detailed report in the March 31, 1951 issue of BUSINESS WEEK. The report indicates an expenditure of over thirteen billion dollars for additional plant facilities this year, the largest categories being chemicals, steel, and transportation equipment.

MAIN PLANTS MOVING FROM OTHER LOCATIONS

This source of new industrial payrolls, while less promising than the establishment of branch plants, still offers some possibilities. The continuing growth of the western market, as well as the increasing congestion in the larger metropolitan centers, will induce many manufacturers to seek new locations. This will be particularly true of the foot-loose types of industry. Security considerations may also be expected to play a part in the movement of small plants away from metropolitan centers.

Federal restrictions on new construction and on business loans will undoubtedly act as a handicap to plant removals in the years immediately ahead. While new branch plants, particularly those devoted chiefly to defense production, will probably be aided in their construction and financing plans, the same encouragement cannot be expected for many plant removals from one place to another. Firms contemplating plant removals will be particularly interested in buying or leasing industrial and commercial buildings that may be available. Such buildings will include not only vacant stores, warehouses, garages, and others usually thought of as suitable for industrial use, but also former school houses, lodge halls, dance halls, etc. As the building shortage becomes acute the search for these structures will extend over a wide area. It will be desirable for local chambers of commerce to collaborate in obtaining information about all types of available buildings and to send this information to appropriate state and federal agencies.

NEW HOME-OWNED INDUSTRIES

Looking now at the third source of new industrial plants--those which are started under local ownership--there appears to be room for a great deal of future development, particularly in consumer goods of many types and in specialized mechanical equipment. The number of such new home-owned industries established here in recent years has been rather small, due mainly to these three reasons:

1) This area's economy has been centered chiefly on mining and on agriculture. Manufacturing is a relatively unfamiliar field for local capital investment.

2) Rising taxes, high construction costs and uncertain business conditions have tended to discourage new ventures.

3) There has been no sustained effort by chambers of commerce or other groups to encourage new manufacturing enterprises in this area, because other problems have claimed primary consideration.

While new home-owned industries may be no more important than branch plants or moved-in plants as potential payroll builders, their possibilities should not be overlooked. War restrictions, however, may considerably hamper the development of some types of new enterprises in the immediate future.

[illegible]

[illegible]

[illegible]

[illegible] available. Such building [illegible]

[illegible]

[illegible]

1) [illegible]

2) [illegible]

3) [illegible]

[illegible]

SUMMARY OF POTENTIALS

The industrial potentials of the San Bernardino Valley may be briefly summarized as follows:

1. The Kaiser steel mill at Fontana, with its program of continuing expansion, will provide an attractive source of supply for steel fabricators in two general groups:
    a. Manufacturers of steel consumer products for the large adjacent Los Angeles market and the secondary market of the entire west coast.
    b. Manufacturers of steel industrial products for the principal western market in the Los Angeles area and the secondary markets of the Bay Region, Portland, Seattle, and San Diego.

2. The Kaiser plant at Fontana will also attract manufacturers of mineral and chemical by-products of the steel-making process.

3. The diversified facilities of San Bernardino and Colton will attract various types of industry using local raw materials and serving nearby major markets.

4. The strategic location of San Bernardino and Colton will also attract distributors serving the growing wholesale markets of San Bernardino and Riverside counties.

5. The unusual advantages of Redlands will attract various types of light industry which are seeking locations in residential and college communities.

The particular types of industries referred to above were discussed in detail in the preceding pages. At this point, we must look at the record of recent industrial development in the Valley area, and the types of industry that are now established here.

DEVELOPMENT TO DATE

For official data we must turn to the latest available estimates of employment in which the figures are given for San Bernardino County as a whole.

These figures, as set forth in the table at the top of the following page, show the phenomenal growth of the past decade, and they indicate trends which may be expected to continue in the years ahead. The figures do not fully reflect the industrial activity of the Valley area, for they do not include the transportation workers in the rail shops, icing plants, etc., who are actually filling industrial jobs.

MANUFACTURING EMPLOYMENT

Manufacturing employment for the county in January of 1951 was 14,725, or 16.5% of all employment. This was an increase of 195.9% over 1940 when manufacturing employment was 4,976, or 10.1% of all employment. This increase of 9,749 was accounted for as follows:

	1940	January 1951	Increase
Food Processing	1,140	1,725	585
Textile and Apparel	40	700	660
Lumber & Wood Products	126	125	-1
Paper,Printing & Publishing	530	750	220
Chemicals	1,166	1,850	684
Stone,Clay & Glass	878	2,025	1,147
Primary Metals	111	6,025	5,914
Machinery	652	1,300	648
All Other	333	225	-108
			9,858
			- 109
		Total	9,749

SOURCE: State Department of Employment.

36% of employment in manufacturing in 1940 was in durable goods, while 64% was in non-durable goods. This showed the predominance of food processing and chemicals in the manufacturing of the county up to that time. Of the 9,749 increase between 1940-50, 80% was in durable goods, the greatest single industry being steel production. By January 1951 durable goods manufacturing accounted for 64.4% of manufacturing employment.

This is not surprising since Southern California has become the chief center of the durable goods industry in the west. Of the total manufacturing employment in Los Angeles County in January 1951, approximately 62% was devoted to the production of durable goods.

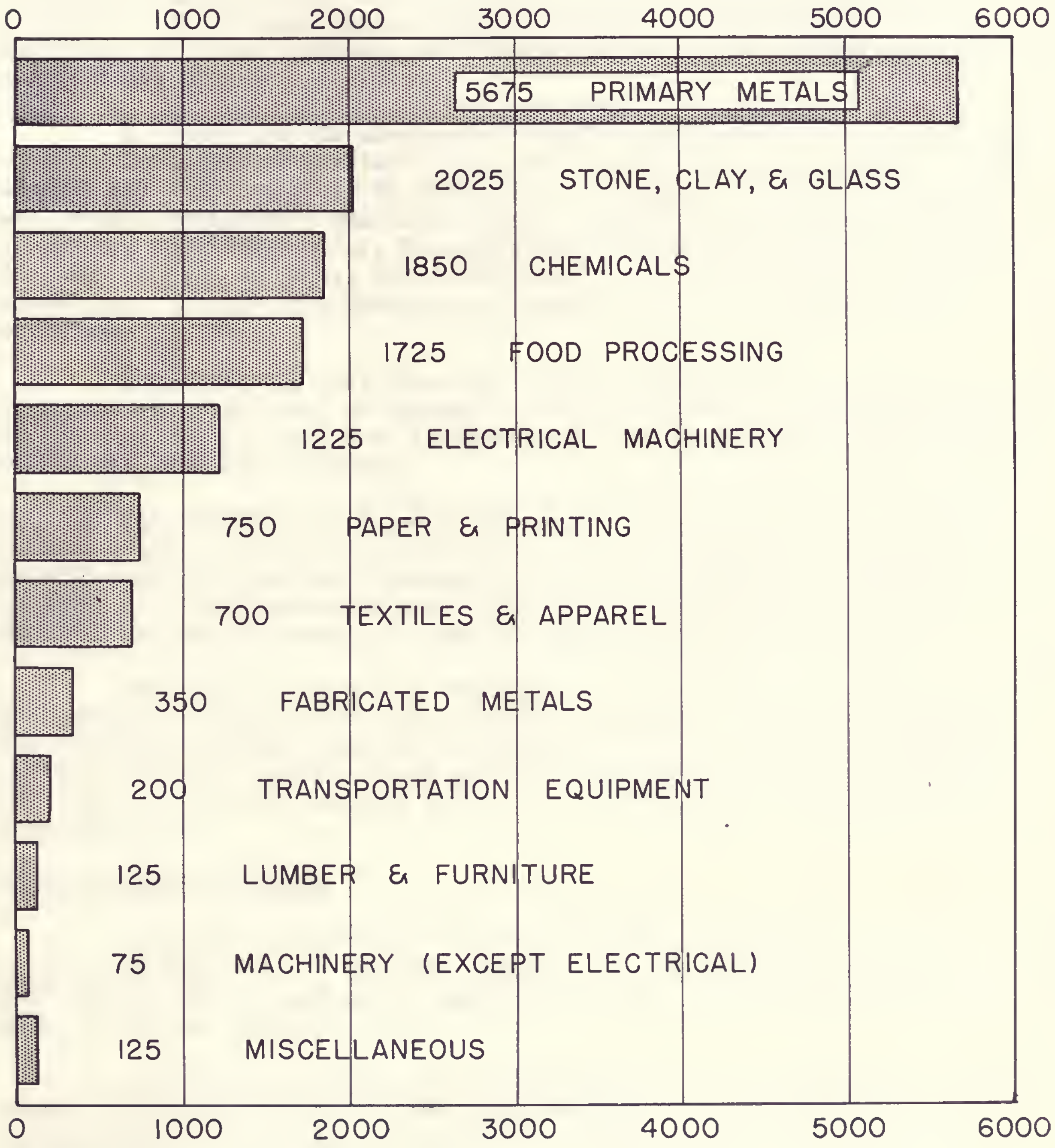
In January 1951 these classifications of industry in San Bernardino County were as follows, listed in order of total employment:

Durable Goods	Non-Durable Goods
Primary Metals	Chemicals
Stone,Clay & Glass	Food & Kindred Products
Electrical Machinery	Printing & Publishing
Fabricated Metals	Textile and Apparel
Transportation Equipment	Rubber Products
Furniture & Fixtures	
Lumber & Wood Products	
Machinery (Except Electrical)	

MANUFACTURING EMPLOYMENT IN SAN BERNARDINO COUNTY

BY MAJOR INDUSTRY TYPES

JANUARY 1951



SOURCE:
STATE DEPARTMENT OF EMPLOYMENT

PART D--EFFECTIVE INDUSTRIAL PROMOTION

ESSENTIALS OF A COMPREHENSIVE PROGRAM

The mission of the San Bernardino Valley Industrial Committee is recorded on pages 5 and 6 of this report. That comprehensive statement makes clear the committee's relationship to the four local chambers of commerce which it represents. It is in effect a jointly created industrial department of those chambers, with their staff and other facilities available for its work.

To carry out its mission the committee will need to work closely with the industrial department of San Bernardino County, from which much counsel and assistance can be expected. From time to time the committee will need special sub-committees to deal with such major common problems as zoning, industrial sites, transportation, water supply, defense production, outside contacts, public relations, etc. These special committees should be as widely representative as possible of all the Valley communities.

The committee will also need to work closely with regional and statewide organizations, as pointed out in the summary at the beginning of this report, and keep them continuously informed regarding developments in the San Bernardino Valley.

The committee's stated aim to keep in touch with the industries already established in the Valley is of primary importance. Their successful operation and their community relations provide the foundation on which any sound expansion must be built, and their contacts with potential new industries will be more fruitful than any other source.

Industrial realtors in the Valley area and in Los Angeles, who are actively concerned with the Valley's development, will also welcome the committee's close cooperation. The local and Los Angeles newspapers and the regional representatives of the national business press will provide further valuable means of making the committee's development program effective.

AMPLE CONTACTS AVAILABLE

All these contacts, and others which the committee can make directly with the types of industry described in the preceding section of this report, will afford ample opportunities for attracting potential new payrolls to this area.

The Committee's task can be more clearly understood if the typical procedure of an industrial firm seeking a new location is described in some detail. This will be done on the pages immediately following.

PART D--METHODS OF INDUSTRIAL PROMOTION

HOW FIRMS SEEK NEW PLANT SITES

What procedures will usually be followed by prospective industrialists who are contemplating the establishment of plants in a new area?

There is a misconception that companies contemplating new plant locations usually want to establish direct contact with the Chamber of Commerce. That this is a mistaken view is attested by repeated surveys of company practices. In the majority of cases the Chamber does not learn of a company's intended move until its plans are far advanced, including the choice of a location. Most of the initial inquiries are made through other sources of information--banks, railroads, and the company's principal suppliers or distributors. In some instances the services of regional or statewide development organizations, consulting engineers, or real estate brokers are also utilized. These procedures are followed not only to save time and effort, but also to minimize the risk of premature disclosure of a company's plans.

"There are three groups of people who shouldn't know that we're even thinking of a move until we're all set to announce it", said a company president in a recent conversation. "First, our employees, who would be upset about moving or possibly losing their jobs. Next, our competitors, who might try to beat us to the goal if they suspected what we were up to. And third, our merchant customers in a town where they thought we considered locating and then didn't."

It is for reasons such as these that a company often conducts its plant location study through indirect or undisclosed channels. When the local Chamber is contacted in the course of such an inquiry, some other objective is characteristically mentioned, such as a home site, personal employment opportunities, or recreational facilities.

At the time of writing this report a California manufacturer was carrying on an investigation of a possible plant location by the following steps:*

1) The company decided that its volume of business and competitive situation in the Central Valley indicated a need for a branch plant in that region.

2) The company asked its bank, which would assist in financing the new plant, to make confidential inquiries regarding the several communities which the company president had in view.

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* A very similar procedure was reported by Lyon Metal Products, Inc., of Aurora, Illinois, at the annual meeting of the American Industrial Development Council, at Washington, D.C., April 3, 1951.

HOW FIRMS SEEK PLANT SITES, Continued:

3) The president asked the sales manager to get two-year sales forecasts from his distributors in the cities concerned, including reference to such local data as tax rates, property values, home building, etc.

4) Meanwhile the bank, having no branches of its own in the valley, sent a vice president to visit its correspondent banks in the designated cities, to discuss local business conditions without mentioning the object in view.

5) The company president made personal inquiries of friends who had some knowledge of the valley--including an oil company executive, an insurance adjuster, and a chain store operator.

6) On the basis of all the information thus obtained, three cities were selected for further consideration. A San Francisco real estate broker, recommended by the bank, was called upon to explore available sites in those three localities. At the present date this inquiry is being pursued, with the aid of local brokers, who have not been told of the client's identity.*

This case, fairly typical of plant location procedure, has been recited in order to indicate the lines along which a Chamber should direct a considerable portion of its promotional efforts. Since the Chamber's information and counsel must often be delivered to its industrial prospects at second hand, it seems essential that these second-hand sources should be well briefed to tell the local story accurately and adequately. This is one of the problems which will be dealt with in detail in the follow-up phase of the current survey.

SELECTIVE USE OF DIRECT CONTACTS:

Nothing that has been said above is intended to mean that direct approaches to manufacturers should be eliminated from the activities of the local chamber. These contacts are highly desirable if they are not pursued to the exclusion of other kinds of promotional work. There should be careful selection, however, of the firms to be contacted.

The first of these yardsticks has already been described in the analysis of location factors earlier in this report. The second is available through current news in the business press. The third can best be obtained from studying the recent history of branch plant development.

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* The company has since decided on its new location on the basis of information obtained through its bank and other sources. Much of the information came originally from the local Chamber.

SELECTIVE USE OF DIRECT CONTACTS, Cont'd:

It seems desirable for the Chamber to have a basic policy well defined and publicly known--a list of qualifications by which every prospect should be checked. This check list should include the company's financial record, labor relations, community relations, reputation of product, seasonal fluctuations, and production techniques--not omitting such matters as noise, smoke and fumes, safety hazards, etc. While industries that are undesirable on these last-named counts can be shut out by zoning ordinances, there are no such legal barriers against industries that may be unwanted for other reasons. There are persuasive devices, however, by which those industries may be discouraged. One of the simplest is to confront them with the Chamber's qualification list and ask for evidence of their good record on each point. Few companies will locate where they seem to be unwelcome.

Besides the "screening" of existing companies that consider locating branch plants or other operations in the area, the local Chamber's Industrial Department from time to time will have to appraise the desirability of new industrial projects that are proposed for establishment here. Sometimes these projects will be backed by solid citizens whose reputation assures the merit of the undertaking; sometimes the backers will be local men less well known but honest and competent; more often the project will be sponsored by outside interests, with or without local participants.*

In the first two types of cases it will not be difficult to learn enough about the proposed enterprise, through the Industrial Department's contacts and research facilities, to determine whether it merits encouragement. New projects promoted chiefly by outsiders are a little harder to evaluate. Local chambers of commerce are frequently approached for cooperation on such large-scale proposals as coal mines, steel mills, shopping centers, and many others. A few of these proposals are bona fide and practicable; most of them are basically unsound; some are found to be dishonest. While the latter can usually be identified by careful inquiry about promoters' past records, it is advisable to apply to every project the following tests:

1) Are the promoters willing to disclose in confidence their complete financial program and the sources of funds already committed?

2) Are they willing also to disclose in confidence their assured sources of raw materials or supplies, and their intended market outlets?

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* The defense program is being used as a springboard for a number of new promotional ventures that need careful investigation.

SELECTIVE USE OF DIRECT CONTACTS, Cont'd:

3) Are the promoters and the other original investors familiar with the field of industry in view?

4) Are the prospective plant executives men of proven ability in that field?

5) Are all the representations of facts regarding the project supported by documentary proof?

6) Are the representations of plans and earnings for the project supported by disinterested and competent opinion?

All this brings us to another point that should be noted in connection with the work of the Industrial Department--the confidential nature of most contacts with industrial prospects. If disclosures such as those listed above, for example, are to be expected from industrialists or their representatives, they must be assured of complete privacy. From time to time there are many inquiries and negotiations which the Chamber staff or committee chairmen must deal with in confidence. These matters cannot be reported or discussed in committee meetings, or be allowed to leak to interested individuals.

Appendix

TABLE NO. 1

POPULATION GAIN BY
NATURAL INCREASE AND MIGRATION
1940-1950

Year	Births*	Deaths	Excess of Births Over Deaths
1940	2,918	2,175	743
1941	3,224	2,079	1,145
1942	3,615	2,299	1,316
1943	4,302	2,396	1,906
1944	4,498	2,461	2,037
1945	4,650	2,557	2,093
1946	5,570	2,697	2,873
1947	6,634	2,904	3,730
1948	6,446	2,835	3,611
1949	6,462	2,789	3,673

Net Natural Increase	23,127
Total Population Gain 1940-1950	120,534
Gain by Migration	97,407

* Births occurring in San Bernardino County

SOURCE: Births and Deaths: California Department of Mental Hygiene.

TABLE No. 2

POPULATION AND EMPLOYMENT INCREASES
SAN BERNARDINO COUNTY
1940 - 1950

	April 1940	July 1950	% Change 1940-1950
Population	161,108	281,642	74.1
Labor Force	59,941	94,775	58.1
Unemployment	10,527	7,800	-25.9
Employed	49,414	86,975	76.0
Employment by Industry			
Agriculture	9,291	12,100	30.2
Manufacturing	4,976	13,875	178.8
Food Processing	1,140	2,075	82.0
Textile and Apparel	40	625	1463.0
Lumber & Furniture	126	125	--
Paper Prod. & Printing	530	700	32.1
Chemicals	1,166	1,625	39.4
Stone,Clay & Glass	878	1,900	116.4
Primary & Fabricated Metals	111	5,425	4787.0
Machinery	652	1,275	95.6
All Other	333	125	-62.5
Non-Manufacturing	35,147	61,000	73.6
Transp.,Commun. & Utilities	5,952	7,675	28.9
Wholesale Trade	3,747	4,575	22.1
Retail Trade	7,825	15,225	94.6
Finance, Real Est. & Ins.	1,204	2,250	86.9
Service	10,214	17,950	75.7
Government	1,688	7,400	338.4
Construction	2,840	5,225	84.0
All Other	1,677	700	-58.3

SOURCE: California Department of Employment.

TABLE NO. 3

UNEMPLOYMENT INSURANCE CLAIMS CONTACTS
WEEKLY AVERAGE
SAN BERNARDINO COUNTY

Year	Month	Initial Claims	Continued Claims
1951	February	376	2,484
	January	467	2,901
1950	December	409	2,853
	November	577	2,631
	October	373	2,046
	September	286	2,001
	August	379	2,393
	July	415	2,700
	June	462	3,271
	May	501	3,295
	April	451	3,928
	March	551	4,438
	February	688	5,090
	January	762	5,282
1949	December	603	5,018
	November	811	4,893
	October	642	4,058
	September	509	4,166
	August	620	4,357
	July	479	4,252
	June	532	4,772
	May	666	5,059
	April	657	5,292
	March	670	5,520
	February	881	5,365
	January	801	5,064

SOURCE: State of California, Department of Employment.

TABLE NO. 4

PER CAPITA SALES
BY TYPE OF ESTABLISHMENT, 1948

STATE AND SAN BERNARDINO COUNTY COMPARED

	California	San Bernardino County
Retail Trade per Capita Total	$ 1,122	$ 980
Food Group	269	258
Automotive Group	175	137
General Merchandise	134	99
Eating & Drinking Places	102	84
Lumber & Building Materials	92	100
Apparel Stores	78	41
Home Furnishings & Appliances	71	53
Gasoline Service Stations	61	75
Drug & Proprietary Stores	37	34
All Other Retail Stores	103	99
Wholesale	1,345	550
Merchant	595	197
Petroleum Bulk	85	112
Assemblers (Farm Products)	82	158
All Other	583	83

SOURCE: 1948 Census of Business

TABLE NO. 5

EMPLOYMENT BY TYPE IN TRADE AND SERVICE ESTABLISHMENTS
San Bernardino County - January 1951

Trade	19,325	
Assemblers of Farm Products		1,950
Other Wholesale		2,250
Retail Trade		15,125
Service Total	18,725	
Hotels, Courts		900
Personal Service		2,025
Business Service		675
Repair Service		1,900
Amusement & Entertainment		750
Medical Service		3,950
Professional Service		5,600
Non-profit Organizations		450
Household Service		2,475
Regular Government		9,600
Government	15,975	
Classified in Service		9,600
Forestry		125
Medical		1,525
Educational Institutions		4,725
Finance	2,300	
Banks, Trust Cos. & Finance Cos.		875
Insurance		625
Real Estate & Other		800

SOURCE: State of California, Department of Employment.

TABLE NO. 6

MANUFACTURING EMPLOYMENT CHANGES
SAN BERNARDINO COUNTY

	April 1940	July 1949	July 1950	Oct. 1950	Jan. 1951
Total	4,976	12,275	13,875	14,425	14,725
Seasonal Food Processing	--	500	575	575	450
Other Food Products	1,140	1,700	1,500	1,550	1,275
Textile & Apparel	40	450	625	625	700
Lumber & Furniture	126	175	145	125	125
Paper & Printing	530	675	700	725	750
Stone, Clay & Glass	878	1,800	1,900	2,000	2,025
Primary Metals	111	3,850	5,150	5,475	5,675
Fabricated Metals	--	225	275	325	350
Machinery (Except Elec.)	--	75	75	75	95
Miscel. Manufacturing*	2,151	2,825	2,950	2,950	3,400

* Chemicals, Electrical Machinery, Aircraft & Parts, and Transportation Equipment included in Miscellaneous Manufacturing.

SOURCE: State of California, Department of Employment.

TABLE No. 7

SEVEN WESTERN STATES STEEL MARKET

Summary Information

	7 Western States--Washington, Oregon, Idaho, California, Utah, Nevada, Arizona		
	Consumption		
	1936-40 Average	1950	Production 1950
Plates	160,000	1,100,000*	1,123,000
Structural Shapes	185,000	350,000	235,000
Carbon Merchant Bars	133,000	320,000	311,000
Reinforcing Bars	145,000	348,000	344,000
Alloy Merchant Bars	10,000	60,000	35,000
Hot Rolled Strip	22,000	65,000	41,000
Cold Rolled Strip	13,000	50,000	20,000
Hot Rolled Black Sheets	125,000	275,000	139,000
Buttweld Pipe	137,000	350,000	103,000
Other Standard & Line Pipe	75,000	150,000	10,000
Tin Plate	399,000	800,000	218,000
Other Steel Products	726,000	1,232,000	524,000
Total	2,130,000	5,100,000	3,100,000

Related Statistics

Population 1939 - 11,236,000 1950 - 16,700,000 1960 - 20,900,000
Construction Value 1939 - $951,800,000 1950 -$4,358,000
Mfg. Wage & Salary Workers
Calififornia - April 1940 - 393,200 1950 - 758,800
Cement Consumption (bbls) 1939 - 18,122,000 1950 - 34,526,000

Per Capita Steel Consumption (lbs)

7 States	1936-40	387	1950 - 611
U. S.			1950 - 925

NOTE: *Includes plates for pipe fabrication

SOURCE: Cost & Commercial Planning Division,
Kaiser Steel Corporation.

Appendix

TYPES OF INDUSTRIES SUITABLE FOR THE SAN BERNARDINO VALLEY

The specific manufacturing industries listed here are those which are practicable in view of the location factors described in Part B of the present survey report.

Detailed descriptions of the industries listed will be found in Volume I of the Standard Industrial Classification Manual published by the Bureau of the Budget, Washington, D.C. The numbers below refer to the categories in that manual.

ORDNANCE & ACCESSORIES - MAJOR GROUP 19

1911 - Guns, howitzers, mortars and related equipment
1921 - Artillery ammunition
1922 - Ammunition loading & Assemb.
1931 - Tanks & Tank components
1941 - Sighting & fire-control equipment
1951 - Small arms
1961 - Small arms ammunition
1999 - Ordnance & accessories, not elsewhere classified.

FOOD & KINDRED PRODUCTS - MAJOR GROUP 20

2011 - Meat packing, wholesale
2012 - Custom slaughtering, whsle.
2015 - Poultry & small game dressing & packing, wholesale
2021 - Creamery butter.
2023 - Condensed & evaporated milk
2024 - Ice cream and ices
2025 - Special dairy products
2033 - Canned fruits, vegetables & soups, preserves, jams, jellies
2034 - Dried & dehydrated fruits & vegetables
2035 - Pickled fruits & veg; veg. sauces & seasonings; salad dressings.
2037 - Frozen fruits, veg. & sea foods
2042 - Prepared foods for animals and fowls.
2051 - Bread & other bakery products.
2052 - Biscuit, crackers & pretzels
2071 - Candy & other confec. products
2081 - Bottled soft drinks & carbonated waters
2082 - Malt liquors
2091 - Baking powder, yeast & other leavening compounds
2092 - Shortening & other cooking and edible fats & oils, not elsewhere classified.
2095 - Flvrg. extracts & flvrg. sirups, not elsewhere classified.
2097 - Manufactured ice.
2098 - Macaroni, spaghetti, vermicelli and noodles.
2099 - Food preparations, not elsewhere classified.

TOBACCO PRODUCTS - MAJOR GROUP 21

(No industries in this group suitable for the Valley Area)

TEXTILE MILL PRODUCTS - MAJOR GROUP 22

2223 - Thread mills
2231 - Broad-woven fabric mills (cotton, silk & synthetic fiber)
2241 - Narrow fabrics & other smallwares mills (cotton, wool, silk, and synthetic fiber).

(Industries Suitable for San Bernardino Valley)

TEXTILE MILL PRODUCTS - MAJOR GROUP 22, Cont'd:

2251 - Full-fashioned hosiery mills
2252 - Seamless-hosiery mills
2253 - Knit outwear mills
2254 - Knit underwear mills
2255 - Knit glove mills
2256 - Knit-fabric mills
2259 - Knitting mills, not elsewhere classified.
2261 - Dyeing & finishing textiles (except woolen & worsted textiles & knit goods)
2292 - Lace goods
2298 - Cordage and twine
2299 - Textile goods, not classified elsewhere.

APPAREL & OTHER FINISHED PRODUCTS - MAJOR GROUP 23

2321 - Men's,youths' & boys' shirts (except work shirts), collars and nightwear
2322 - Men's, youths' & boys' underwear.
2323 - Men's, youths' & boys' neckwear
2327 - Men's,Youths' & boys' trousers
2328 - Work shirts
2329 - Men's,youths & boys' work, sport & other clothing, not elsewhere classified.
2331 - Women's & misses' blouses
2333 - Women's & misses' dresses
2334 - Household apparel
2337 - Women's & misses' suits,coats (except fur coats) & skirts
2338 - Women's neckwear & scarfs
2339 - Women's & misses' outerwear, not elsewhere classified
2341 - Women's, misses',children's & infants under & nightwear
2342 - Corsets & allied garments
2351 - Millinery
2361 - Children's & infants' dresses
2363 - Children's & infants' coats
2369 - Children's & infants' outerwear
2382 - Work gloves & mittens (fabric & leather combined)
2383 - Suspenders,garters & related products
2384 - Robes & dressing gowns
2387 - Belts
2388 - Handkerchiefs
2389 - Apparel, not elsewhere classified
2391 - Curtains & draperies
2392 - Housefurnishings (except curtains & draperies)
2393 - Textile bags
2394 - Canvas products
2396 - Trimmings, stamped art goods and art needlework
2399 - Fabricated textile products, not elsewhere classified

LUMBER & WOOD PRODUCTS (EXCEPT FURNITURE) - MAJOR GROUP 24

2431 - Millwork plants
2433 - Prefabricated wooden buildings & structural members
2441 - Fruit & vegetable baskets
2491 - Wood preserving
2493 - Mirror frames & picture frames
2499 - Wood products, not elsewhere classified

FURNITURE & FIXTURES - MAJOR GROUP 25

2514 - Metal household furniture
2515 - Mattresses & bedsprings
2519 - Household furniture, not elsewhere classified
2531 - Public building & related furniture
2532 - Professional furniture

(Industries Suitable for San Bernardino Valley)

FURNITURE & FIXTURES - MAJOR GROUP 25, Cont'd

2541 - Partitions, shelving, lockers, & office & store fixtures
2561 - Window & door screens & weather strip.
2562 - Window shades
2563 - Venetian blinds
2591 - Restaurant furniture
2599 - Furniture & fixtures, not elsewhere classified

PAPER & ALLIED PRODUCTS - MAJOR GROUP 26

2641 - Paper coating & glazing
2651 - Envelopes
2661 - Paper bags
2691 - Die-cut paper & paperboard; and cardboard
2699 - Converted paper products, not elsewhere classified
2671 - Paperboard boxes: folded, set-up and corrugated

PRINTING, PUBLISHING & ALLIED INDUSTRIES - MAJOR GROUP 27

2711 - Newspapers
2721 - Periodicals
2741 - Miscellaneous publishing
2751 - Commercial printing
2761 - Lithographing
2771 - Greeting cards
2781 - Bookbinding
2782 - Blank bookmaking & paper ruling
2792 - Engraving and plate printing
2793 - Photoengraving
2794 - Electrotyping & stereotyping

CHEMICALS & ALLIED PRODUCTS - MAJOR GROUP 28

2811 - Sulphuric acid
2812 - Alkalies and chlorine
2819 - Industrial inorganic chemicals not elsewhere classified
2822 - Intermediates,dyes,color lakes and toners
2823 - Plastics materials & elastomers except synthetic rubber
2825 - Synthetic fibers
2826 - Explosives
2829 - Industrial organic chemicals, not elsewhere classified
2831 - Biological products
2832 - Botanical products
2833 - Inorganic & organic medicinal chemicals
2834 - Pharmaceutical preparations
2841 - Soap & glycerin
2842 - Cleaning & polishing preparations
2851 - Paints, varnishes, lacquers, japans, & enamels
2852 - Inorganic color pigments
2853 - Whiting,putty, wood fillers, and allied paint products
2864 - Natural dyeing materials
2871 - Fertilizers (manufacturing & Mix)
2886 - Grease and tallow
2891 - Printing ink
2893 - Perfumes, cosmetics, & other toilet preparations
2894 - Glue and gelatin
2896 - Compressed & liquified gases
2897 - Insecticides & fungicides
2899 - Chemicals & chemical products, not elsewhere classified

(Industries Suitable for San Bernardino Valley)

PETROLEUM & COAL PRODUCTS - MAJOR GROUP 29

(No industries in this group suitable for the San Bernardino Valley Area)

RUBBER PRODUCTS - MAJOR GROUP 30

3021 - Rubber footwear
3031 - Reclaimed rubber
3099 - Rubber industries, not elsewhere classified

LEATHER & LEATHER PRODUCTS - MAJOR GROUP 31

3141 - Footwear (except house slippers & rubber footwear)
3142 - House slippers
3151 - Dress & semidress leather gloves
3152 - Leather work gloves & mittens
3161 - Suitcase, brief cases, bags, trunks & other luggage
3171 - Women's handbags & purses
3172 - Small leather goods
3199 - Leather goods, not elsewhere classified

STONE, CLAY, AND GLASS PRODUCTS - MAJOR GROUP 32

3221 - Glass containers
3231 - Glass products made of purchased glass.
3241 - Cement, hydraulic
3259 - Structural clay products, not elsewhere classified
3261 - Vitreous & semivitreous plumbing fixtures
3262 - Vitreous-china table & kitchen articles
3263 - Fine earthenware (whiteware) table & kitchen articles
3264 - Porcelain electrical supplies
3269 - Pottery Products, not elsewhere classified
3271 - Concrete products
3272 - Gypsum products
3251 - Brick and hollow tile
3253 - Floor & wall tile,except quarry tile
3254 - Sewer pipe
3255 - Clay refractories
3274 - Lime
3275 - Mineral wool
3281 - Cut-stone & stone products
3291 - Abrasive products
3292 - Asbestos products
3293 - Steam & other packing & pipe and boiler covering
3295 - Minerals and earths: ground or otherwise treated
3296 - Sand-lime brick, block & tile
3298 - Statuary & art goods (factory production)

PRIMARY METAL INDUSTRIES - MAJOR GROUP 33

3311 - Blast furnaces
3312 - Steel works & rolling mills
3313 - Electrometallurgical products
3321 - Gray-iron foundries
3322 - Malleable-iron foundries
3323 - Steel foundries
3331 - Primary smelting & refining of copper
3332 - Primary smelting & refining of lead
3333 - Primary smelting & refining of zinc
3339 - Primary smelting & refining of non-ferrous metals,not elsewhere classified
3341 - Secondary smelting & refining of nonferrous metals and alloys
3359 - Rolling,drawing, & alloying of non-ferrous metals, not elsewhere classified.

(Industries Suitable for San Bernardino Valley)

PRIMARY METAL INDUSTRIES - MAJOR GROUP 33, Continued

3361 - Nonferrous Foundries
3391 - Iron & steel forgings
3392 - Wire drawing
3393 - Welded & heavy-riveted pipe
3399 - Primary metal industries, not elsewhere classified

FABRICATED METAL PRODUCTS (EXCEPT ORDNANCE, MACHINERY & TRANSPORTATION EQUIPMENT - MAJOR GROUP 34

3421 - Cutlery
3422 - Edge tools
3423 - Hand tools (except edge tools, machine tools, files & saws)
3424 - Files
3425 - Hand saws & saw blades
3429 - Hardware, not elsewhere classified
3431 - Enameled-iron & metal sanitary ware & other plumbers' sup.
3432 - Oil burners, domestic & Industrial
3439 - Heating & cooking apparatus (except electric) not elsewhere classified
3441 - Fabricated structural steel & ornamental metal work
3442 - Metal doors, sash, frames, molding and trim
3444 - Sheet-metal work
3461 - Vitreous-enameled products
3462 - Automobile stampings
3463 - Stamped & pressed metal products (exc. automobile stampings)
3464 - Powder metallurgy
3465 - Enameling, japanning & lacquering
3466 - Galvanizing & other hot-dip coating
3467 - Engraving on metal
3468 - Electroplating, plating & polishing
3471 - Lighting fixtures
3489 - Wirework, not elsewhere classified
3491 - Metal shipping barrels, drums, kegs, and pails
3493 - Steel springs
3494 - Bolts, nuts, washers, and rivets
3495 - Screw-machine products
3496 - Collapsible tubes
3499 - Fabricated metal products, not elsewhere classified

MACHINERY (EXCEPT ELECTRICAL) - MAJOR GROUP 35

3521 - Tractors
3522 - Agricultural mach. (exc. tractors)
3531 - Construction, mining & similar mach. (exc. oilfield mach & tools)
3542 - Metalworking machinery (except machine tools)
3543 - Machine-tool accessories, other metalworking-machinery acces., & machinists' precision tools.
3551 - Food-products machinery
3553 - Woodworking machinery
3561 - Pumps, air & gas compressors, & pumping equipment
3562 - Elevators & escalators
3563 - Conveyors & conveying equipment
3564 - Blowers, exhaust & ventilating
3565 - Industrial trucks, tractors, trailers & stackers
3566 - Mechanical power-transmission equipment (except ball and roller bearings)
3569 - General industrial machinery & equipment, not elsewhere classified
3575 - Vending, amusement & other coin-operated machines
3576 - Scales & balances
3579 - Office & store machines and devices, not elsewhere classified
3581 - Domestic laundry equipment
3584 - Vacuum cleaners
3585 - Refrigerators, refrigeration machinery & air-conditioning units

(Industries Suitable for San Bernardino Valley)

MACHINERY (EXCEPT ELECTRICAL) - MAJOR GROUP 35, Continued:

3586 - Measuring & dispensing pumps
3589 - Service-industry & household machines, not elsewhere classified
3591 - Valves & fittings (except plumbers' valves)
3592 - Fabricated pipe & fittings
3599 - Machine shops (jobbing & repair)

ELECTRICAL MACHINERY, EQUIPMENT & SUPPLIES-MAJOR GROUP 36

3611 - Wiring devices & supplies
3614 - Motors, generators & motor-generator sets.
3615 - Power & distribution transformers
3616 - Switchgear, switchboard apparatus & industrial controls
3617 - Electrical welding apparatus
3619 - Electrical equipment for industrial use, not elsewhere class.
3621 - Electrical appliances
3641 - Electrical equipment for motor vehicles, aircraft & railway locomotives and cars.
3651 - Electric lamps
3661 - Radios, raido & television equipment (exc. radio tubes), radar & related detection apparatus and phonographs.
3669 - Communication equipment, not elsewhere classified
3691 - Storage batteries
3693 - X-ray & therapeutic apparatus & non-radio electronic tubes
3699 - Electrical products, not elsewhere classified.

TRANSPORTATION EQUIPMENT - MAJOR GROUP 37

3713 - Truck & bus bodies
3714 - Motor-vehicle parts & accessories
3715 - Truck trailers
3716 - Automobile trailers (for attachment to passenger cars)
3729 - Aircraft parts & auxiliary equip., not elsewhere classified
3741 - Locomotives and parts
3742 - Railroad & street cars
3751 - Motorcycles, bicycles & parts
3799 - Transportation equipment, not elsewhere classified

PROFESSIONAL, SCIENTIFIC, & CONTROLLING INSTRUMENTS; PHOTOGRAPHIC & OPTICAL GOODS; WATCHES AND CLOCKS - MAJOR GROUP 38

3811 - Laboratory, scientific & engineering instruments (except surgical, medical & dental)
3821 - Mechanical measuring & controlling instruments
3831 - Optical instruments & lenses
3841 - Surgical & medical instruments
3843 - Dental equipment & supplies
3851 - Opthalmic goods
3861 - Photographic equipment and supplies

Appendix

(Industries Suitable for San Bernardino Valley)

MISCELLANEOUS MANUFACTURING INDUSTRIES - MAJOR GROUP 39

3911 - Jewelry (precious metal)
3914 - Silverware & plated ware
3941 - Games & toys (except dolls and children's vehicles)
3942 - Dolls
3943 - Children's vehicles
3949 - Sporting & athletic goods, not elsewhere classified
3951 - Pens, mechanical pencils, and pen points
3953 - Hand stamps, stencils & brands
3954 - Artists' materials
3955 - Carbon paper & inked ribbons
3961 - Costume jewelry & costume novelties (exc.precious metal)
3971 - Fabricated plastics products, not elsewhere classified
3981 - Brooms & brushes
3983 - Matches
3984 - Candles
3986 - Jewelry cases & instrument cases
3987 - Lamp shades
3991 - Beauty shop and barber shop equipment
3993 - Signs & advertising displays
3995 - Umbrellas, parasols, and canes
3997 - Soda-fountain & beer-dispensing equipment
3998 - Models & patterns (except paper patterns
3999 - Miscel. fabricated products, not elsewhere classified

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